

## **Historic, Archive Document**

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"DIAMOND  
QUALITY"

TRUE TO NAME TESTED

SEEDS

*Annual  
Catalog*

1915

Golden  
West  
Sweetest  
Richest  
Best yielding  
Sugar Corn  
Pkt. 10¢

PORTLAND  
Diamond **SEED** Quality  
COMPANY

# Parcel Post Rates

**PARCEL POST RATES** are based on **DISTRICTS** and **ZONES**. THE DISTRICT includes the office where mailed and the rural routes therefrom.

A DISTRICT RATE OF 5 CENTS for the first pound and 1 cent for each additional two pounds or fraction thereof up to 50 pounds (the district weight limit) is charged between points in this district.

THE 1st ZONE covers a radius of 50 miles from the point of mailing; the rates are 5c for the first pound and 1 cent for each additional pound or fraction thereof, up to the limit of 50 pounds.

THE 2nd ZONE covers a radius of 150 miles, and the rate is 5c for the first pound and 1 cent for each additional pound or fraction thereof; weight limit of 50 pounds.

 A WEIGHT LIMIT OF 20 POUNDS APPLIES TO THE 3rd, 4th, 5th, 6th, 7th and 8th ZONES. ZONE RATES increase with the distance -- see table.

## WHEN YOU ORDER FROM PORTLAND

look for the Zone that corresponds to the distance you are away. Then note where the weight of your package is

marked on the table of rates, on the same line *under your ZONE* will be shown the amount of postage to be added when ordering. We have catalogued the weight of most items mailable by parcel post, and by the aid of the table here shown you can always figure your postage.

### SIZE AND WEIGHT

A Parcel Post package may weigh from four ounces to fifty pounds for the first and second zones—with a twenty pound weight limit for third to eighth zones, and must not exceed in size 72 inches in length and girth combined.

Four ounces or less will be charged for at one cent per ounce or fraction thereof, except on Books, Seeds, Plants, Bulbs, etc., which are 1c for 2 ozs. up to 8 ozs. for any distance.

**SEEDS, BOOKS, ETC.—**  
Seeds, Plants and Books over 8 ozs. and other 4th Class matter over 4 ozs. are charged at pound rates, a fraction being charged as a full pound.

WEIGHT	1st Zone		2nd Zone	3rd Zone	4th Zone	5th Zone	6th Zone	7th Zone	8th Zone
	Local rate	Zone 50 miles	50 to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1000 miles	1000 to 1400 miles	1400 to 1800 miles	1800 to over 1800 miles
1 pound				\$0.06	\$0.07	\$0.08	\$0.09	\$0.11	\$0.12
2 pounds	Local			.08	.11	.14	.17	.21	.24
3 pounds	Zone	First and		.10	.15	.20	.25	.31	.36
4 pounds	Rate 5c	Second Zone		.12	.19	.26	.33	.41	.48
5 pounds	for first	Rate 5 cents		.14	.23	.32	.41	.51	.60
6 pounds		for the		.16	.27	.38	.49	.61	.72
7 pounds		pound		.18	.31	.44	.57	.71	.84
8 pounds		1c for		.20	.35	.50	.65	.81	.96
9 pounds		each ad-		.22	.39	.56	.73	.91	1.08
10 pounds		ditional		.24	.43	.62	.81	1.01	1.20
11 pounds		two		.26	.47	.68	.89	1.11	1.3
12 pounds		each		.28	.51	.74	.97	1.21	1.
13 pounds		pounds		.30	.55	.80	1.05	1.31	1.
14 pounds		up to		.32	.59	.86	1.13	1.41	1.
15 pounds		the		.34	.63	.92	1.21	1.51	1.8
16 pounds		limit,		.36	.67	.98	1.29	1.61	1.9
17 pounds	50	weight limit,		.38	.71	1.04	1.37	1.71	2.0
18 pounds		pounds		.40	.75	1.10	1.45	1.81	2.16
19 pounds		50 pounds		.42	.79	1.16	1.53	1.91	2.28
20 pounds				.44	.83	1.22	1.61	2.01	2.40

The 8th zone rate applies to ALASKA, MEXICO, CUBA, HAWAII, PANAMA and the PHILIPINES and allows Full Weight, 20 Lbs.

Postage to Canada on 4th class pkgs. of over 4 oz. and NOT EXCEEDING 4 Lbs. 6 Ozs., go at 8th zone rate.

## Our FREE PREMIUMS

Your Own Selections

As an expression of our good will and appreciation of your business we offer these premiums.

 If you wish to take advantage of these premium offers, be sure to make your selections when sending in your orders; otherwise they cannot be sent. They are given only with cash orders, at catalog prices.

**With a \$2.50 order** Your choice of Vegetable or Flower Seeds in packets or ounces to the value of 25c, or any 25c Lily, Dahlia, Canna or Gladioli Bulb.

**With a \$10 order** You may double the premiums on the \$5.00 order or choose any 50c book in our list.

**With a \$5.00 order** Double the \$2.50 Premium, or any 25c book, or 25c to apply on any book we list, or your choice of any 25c package of Stock or Poultry Food or Remedy, or any of our Seed Potatoes, or Flowering Bulbs to value of 50c.

**With a \$25 order** Three times the premium on the \$10.00 order or \$1.50 to apply on any additional item selected.

**NOTE.**—The amount allowed on premiums cannot be deducted from the price, but is allowed over the amount of the order.

IF YOU SELECT PREMIUMS LISTED ABOVE YOU ARE NOT ENTITLED TO OUR SPECIAL DISCOUNT OFFER BELOW ON SEEDS IN PACKETS AND OUNCES.

## Special Rates on Seeds in Packets or Ounces—Postpaid

**25 cents Worth of Seeds FREE**

on quantities over one ounce, or where any other premium is taken.

We pay one cent (in seeds) per name for good addresses. See back of Order Sheet.

 NO PREMIUMS on GRASSES, GRAINS or FOODS, which are subject to market changes

# Portland Seed Company's COMPLETE SEED ANNUAL



For  
1915

**1915** PROMISES to be the banner year for the man who depends upon the products of the soil — prepare to reap your share of the profits by having your ground in good tilth and planting only clean seed of high germination.

THIS OUR LATEST CATALOG of "Diamond Quality" tested seeds — the largest and most complete we have ever issued — will prove helpful in your selection of the most profitable and satisfactory varieties, as we offer only those that in our experience are most desirable. The descriptions are dependable and such general information is given as the limited space in a catalog will permit.

A HOME GARDEN for you who live in town will do more to reduce the "high cost of living" than all other efforts at economy. There is no more fascinating diversion; no more profitable and healthful means of employing a little extra time; and it is astonishing the amount that can be produced in a very small space.

GOOD SEEDS, SQUARE DEALING, RIGHT PRICES and a willingness to anticipate the demands of our trade, have developed our equipment and facilities to their present high standard of efficiency, and with every confidence that our efforts are appreciated we shall spare no expense to serve you faithfully and well. Write us — your inquiries or orders, large or small, will have careful and courteous attention.

Portland Seed Company

## WHEN AND HOW TO ORDER

**S**END in your combined orders for seeds, plants, supplies, etc., at once. We are prepared to fill orders as soon as this Catalog reaches you, and if you do not want all sent now we will send part now and the balance later. The advantage of this is that your order is entered and filled or stock reserved so the complete order, or any part, can be sent upon notice without delay. If you want part or all of your order held, state it distinctly with date when shipment is to be made. All orders for potatoes, plants, and other perishable goods are carefully booked on receipt, and filled in rotation as soon as weather permits. If shipped early, they are at buyer's risk.

**BE SURE TO SIGN YOUR NAME**, giving Postoffice and State. **DO NOT WRITE LETTERS ON THE SAME SHEET AS ORDERS.**

**USE ORDER BLANK** in the front of your Catalog, **CAREFULLY FILLING OUT THE BLANK SPACES AT THE TOP FOR SHIPPING DIRECTIONS.**

**SEEDS POSTPAID BY MAIL.** We send all vegetable and flower seeds in quantities of one pound or less by mail, postpaid, to any Postoffice in the United States, at the prices named in this Catalog unless otherwise stated.

**BY FREIGHT OR EXPRESS.** In ordering vegetable or flower seeds to be **SENT BY FREIGHT OR EXPRESS AT YOUR EXPENSE**, deduct 10c per pound from single pound postpaid prices.

**PREPAY STATIONS.** When you send in orders to go by freight or express be sure that you add money enough to pay freight charges if your station is a prepay point, which is **ALWAYS THE CASE WHERE THERE IS NO REGULAR AGENT.**

**LARGE ORDERS.** Any dealer, market gardener, institution or individual wishing seed in large quantities, is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market prices. **A LETTER OF INQUIRY MAY SAVE YOU DOLLARS** if you want to buy in quantity.

**COMPLAINTS OR PRAISES.** If you are well pleased with our goods and the manner of doing business, tell everyone. If you are not, tell us, so we can please you. Our best efforts will be put forth in filling all orders carefully and promptly in a way that will please you.

**USE MONEY-ORDERS, POSTOFFICE OR EXPRESS, BANK DRAFTS OR REGISTERED LETTERS.** **DO NOT SEND PERSONAL CHECKS** as your order may be delayed for their collection or identification. Stamps will be accepted on small orders.

**BE SURE TO ORDER EARLY—BEFORE STOCKS ARE DEPLETED.**

**NOTE.**— We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.:— We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, nursery stock, roots or plants sent out and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once.— Portland Seed Company.

# VEGETABLE SEEDS



**DIAMOND QUALITY** seeds are grown especially for us from selected strains of varieties that years of trial and observation have proven to be most satisfactory for home and market gardens. Many of our seed crops are grown under our personal supervision — others come from the world's great centers of seed production of Europe and America where conditions are most favorable for their perfect development.

## "DIAMOND QUALITY SEEDS" You Can Protect Yourself are Tested Seeds

To further guard the interests of our customers and maintain our standard of excellence, we have installed a modern seed laboratory, equipped as recommended by the U. S. Dept. of Agriculture, placing in charge a certified seed analyst. It is here that final tests and inspection are made, and only those seeds that are *above* the standards are offered to the public, and bear our **Diamond Trade Mark** — the mark of quality that stamps them as the best obtainable.

by planting "Diamond Quality" Seeds—  
Tested for purity and germination—  
They are above the standards of the pure seed laws.



 *We are the only Seed Company maintaining a seed laboratory in Oregon.*

*A corner of our seed laboratory*

## General Notes on Planting and Culture

**W**E have marked those varieties that mature early with this little Diamond,  — our trade mark. This will aid you in the selections for your home garden.

If you live in Northwestern Oregon or Washington you will have better success with your garden by planting these early maturing varieties after the Spring weather is settled and the ground warm, than if you planted very early, as many seeds will not give the best results in the cold damp of the early Spring, and even if they live, the plants may be stunted and not grow. These suggestions are only general, as you will note that many special sorts can be planted very early.

If you live in the Willamette Valley or Southern Oregon you can plant almost anything as early as the condition of the soil will permit.

**Do not work the soil when it is wet**, as this has a tendency to make it lump and bake and may put it in such shape that nothing can thrive in it. Wait until it is just dry enough to crumble away nicely when turned over, and if you will press the dirt firmly down on the seeds, getting right in the row and tramping the soil down with your feet — they will germinate quickly even in comparatively dry soil. Any extra work in carefully preparing the soil will more than repay you in the increased results, and always remember that constant and thorough cultivation is almost equal to water and fertilizer both, and will insure a good crop even in a dry season, and on ordinary soil.

Plan your plantings and keep a garden book or record of some sort, for by so doing you will get the utmost pleasure and profit from your garden and as the seasons pass you will find this record an invaluable aid and reference work. You will soon learn what varieties are best for your requirements and to identify your favorites, and when buying seeds or plants you will know just what to order.

If you are in doubt about what you should do, or want any special information, be sure to write to us. We will be pleased to give your inquiries our careful attention, and advise you to the full extent of our knowledge.

# ASPARAGUS

*Asparagus is one of the earliest Spring vegetables, and would be in universal use were it not for the mistaken idea that it is difficult to grow. In reality it can be produced very easily and cheaply. A bed 15x50 feet, requiring about 100 plants, should give an abundant supply for the average family.*

**CULTURE.**—Soak the seeds 24 hours in warm water, and sow early in drills one foot apart. An ounce of seed will sow about 300 feet of drill. Keep the soil mellow and free from weeds. After one year's growth, transplant into permanent beds that have been carefully prepared by working to a depth of 24 inches, manuring deeply. Set the plants about 18 inches apart in the rows, spreading the roots out, firming the soil down on them. If your soil is well drained the bed may be level, but if not it must be elevated a little. Give a good dressing of well rotted manure after planting and an occasional application of salt or brine. In the Fall when the foliage turns yellow, cut it off and give a dressing of manure or good commercial fertilizer. A warm, sandy soil is the best. At no period of its growth should the asparagus crop be allowed to lack for manuring. *From one to two years' time can be saved by buying roots of us. See plant department. 7260 roots will plant an acre.*

## Argenteuil

A popular French asparagus of great merit; larger and superior to Palmetto; of vigorous, even growth; very early and free from disease.

**Pkt., 5c; oz., 15c; 1/4 lb., 35c; 1 lb., \$1.00.**

## Connover's Colossal

A large and rapid grower of excellent quality. Makes large uniform stalks of finest quality. This is the famous "Bouldin Island" Asparagus, a superior canning variety.

**Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 65c.**

## Columbian Mammoth White

A newer, distinct and valuable variety. The stalks are white, of the largest size; very productive and early.

**Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 65c.**

## Palmetto

The favorite green asparagus. Extra early and the uniformly large stalks remain tender longer than any other variety, being in prime condition for some days after coming above the ground. Palmetto is disease resistant, and a heavy, sure cropper.

**Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 65c.**

### ASPARAGUS PLANTS—Four Best Varieties.

**ONE-YEAR OLD PLANTS**—Postpaid, 25c dozen, 75c per 50, \$1.00 per 100. By express or freight, 20c dozen, 50c per 50, 75c per 100, \$6.00 per 1000.

**TWO-YEAR OLD PLANTS**—Postpaid, 40c per dozen, \$1.00 per 50, \$1.50 per 100. By express or freight, 25c per dozen, 75c per 50, \$1.00 per 100, \$8.00 per 1000.

ASPARAGUS  
by  
Hexamer  
163 Pages  
55c  
Postpaid.

## Artichoke Large Green Globe.

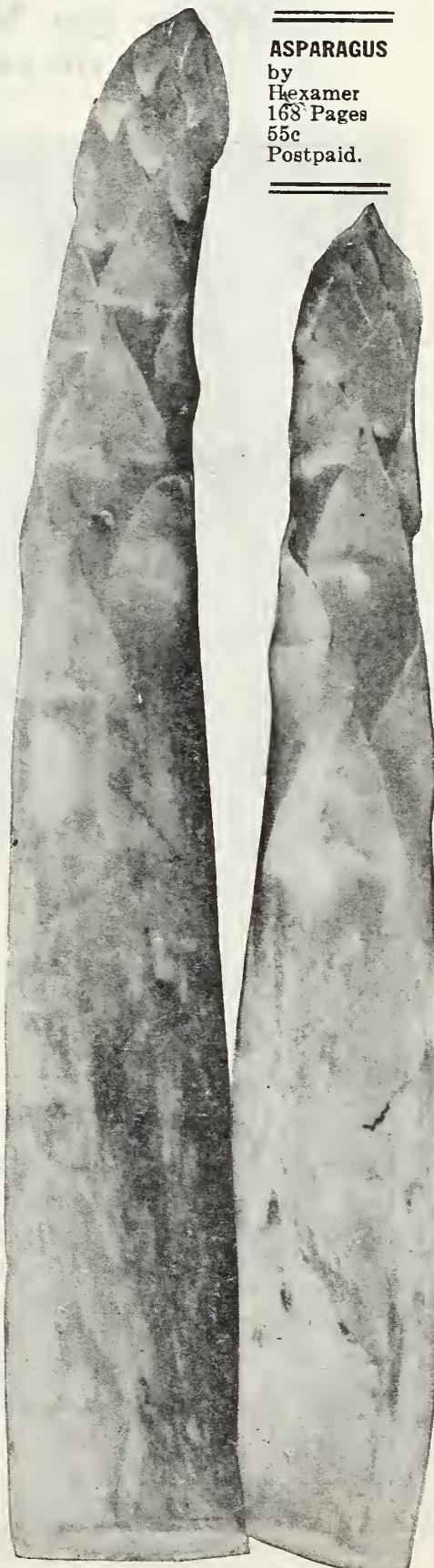
The variety used as a table vegetable. The edible portion is the thick end of leaf of the flower head. Sow early in drills and when about ten inches high transplant into rows four feet apart each way.

*The buds when in blossom resemble huge thistles and the foliage being highly ornamental, this variety is much used for hedges and display in parkings.*

**Pkt., 5c; oz., 35c.**

## Jerusalem.—White.

Distinct from the globe; produces tubers like potato; grown in the same way. A fine vegetable for table and also valuable as hog feed. **Price and description under Field Seeds.**





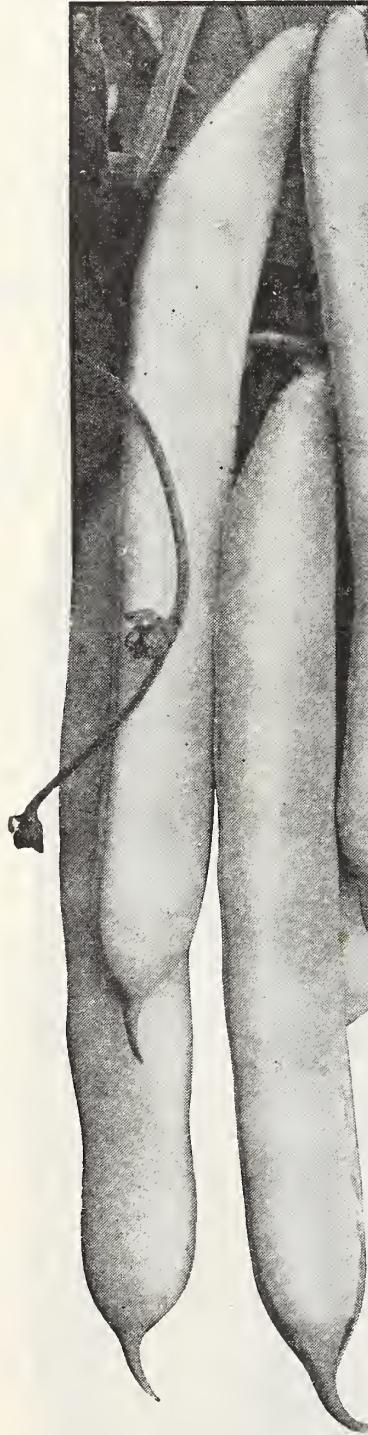
# BEANS

Our general selection of varieties include those that have given best average yield, are most hardy and will give best results in their respective classes.

**CULTURE.**—The soil best adapted for growing beans is a light, rich, well-drained loam, which was well manured for the previous crop. If the ground is too freshly manured, the plants are apt to run to vines and set few blossoms. Plant in drills about two inches deep and from eighteen inches to two feet apart, as soon as the ground is dry enough and warm—about May 1st, or later, and for succession up to July 15th. Beans are very sensitive to cold and wet before they have sprouted, but are not so liable to be damaged after they are above ground.

 When ordering beans by mail add 10c per pound for postage

## Wax or Yellow Podded Kinds DWARF OR BUSH VARIETIES



IMPROVED  
GOLDEN WAX

*The Beans  
we offer are  
chosen for their  
Quality and  
Productiveness.  
The seeds are  
Hand  
Picked*

### Pencil Pod Black Wax

"Pencil Pod" is the most satisfactory of the early dwarf Wax Beans.

Of dwarf, bushy growth, about fifteen inches high, large luxuriant foliage, beneath which in great clusters will be found an enormous crop of beautiful straight yellow pods six to seven inches long, well rounded, deeply "saddle backed," meaty and solid clear through; they are brittle, of rich mild flavor, and entirely stringless. An early, sure cropper; of the finest quality.

Pkt., 10c; lb., 30c; 10 lbs., \$2.50

### Golden Wax—Improved

A splendid improvement over the popular Golden Wax. Beans are very uniform, of a bright golden yellow, about four inches long, rather flat. The meaty pods are crisp, tender and entirely stringless. Bush grows stiffly erect and bears enormously. Pkt., 10c; lb., 25c; 10 lbs., \$2.25.

### Golden Wax

Very hardy and productive. Our stock of this popular standard variety is extra choice.

Pkt., 10c; lb., 25c; 10 lbs., \$2.00

### Davis Wax

Rustless and immensely productive, very hardy and one of the best for market gardeners. The dried bean is kidney-shaped, clear white, and a favorite for baking and canning.

Pkt., 10c; lb., 30c; 10 lbs., \$2.50

### Wardwell's Kidney Wax

Vines are of medium size, with long, flat pods of a delicate waxy yellow, very brittle and entirely stringless. We specially recommend this bean.

Pkt., 10c; lb., 30c; 10 lbs., \$2.50



### Black Wax

Market gardeners and others to whom earliness is a matter of prime importance cannot afford to be without this, which is truly the "earliest of all" wax beans. Pkt., 10c; lb., 25c; 10 lbs., \$2.25.

## BEANS—Continued

### Dwarf or Bush—Green Podded Kind

 When ordering beans by mail add 10c per pound for postage

#### Stringless Green Pod.

The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than any other green-podded bean. It is of immense value, not only to the market gardener, but also for those who seek early beans of a rare quality for the home table.

Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

Dwarf Horticultural  
or  
"Cranberry Bean"



#### Extra Early Red Valentine.

This improved strain has a healthy, vigorous growth. The Beans are small, but the pods are thick, round and fleshy; very tender, rich and quite stringless. A popular bean for canning green. Bush grows to a height of fifteen inches and is very prolific.

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

#### Refugee, or Thousand To One.

Of great value on account of its hardiness, vigorous growth and wonderful productiveness. Is not excelled by any other variety as a snap bean, and is considered the best for pickling or canning. Beans small, dark purple, veined brown. Pods of perfect form, dark green, veined purple.

Pkt., 10c; lb., 35c; 10 lbs., \$3.00.

#### White Navy.

Grown extensively for marketing dry shelled. The best known small white bean. Dwarf in growth and very productive.

Pkt., 15c; lb., 15c; 10 lbs., \$1.25.

#### Canadian Wonder.

This splendid bush bean is the largest, most prolific of the green-podded sorts, and is entirely stringless in its early development. Comes a little later than the New Stringless Green Pod, but continues in bearing throughout the season, and is excellent shelled green.

Pkt., 10c; lb., 25c; 10 lbs., \$.200.

#### Dwarf Horticultural. or "Cranberry Bean"

Grows erect, strong and shrubby, and is very prolific. The bean is highly prized, green shelled. It is rather large, plump, and beautifully mottled yellow and red; one of the most delicious and desirable beans and a great favorite with market gardeners.

Pkt., 10c; lb., 25c; 10 lbs., \$2.00

#### Lady Washington.

Sturdy, bushy plant, erect habit. The bean is large, broad and is a great improvement over the old "Navy" being much earlier, a little larger, and a very heavy yielder, being especially adapted to our Western soils, and is entirely free from disease. Bush attains a height of about fourteen inches, and beans mature in September.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

#### Broad Windsor.

Stalk erect, strong and shrubby. The bean is large, broad and flat; should be planted early and is best green shelled. An English variety.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25

#### Castor Bean.

Used for medicinal purposes and by some claimed to keep moles away. Castor beans are very ornamental, the plants and foliage being large and tropical in appearance.

Pkt., 10c; lb., 25c.

Our No. 1  
Best Fertilizer  
for Beans



## Climbing or Pole Beans

 If ordering by mail add 10c per pound for postage

**CULTURE.**— Do not plant until the soil has become warm and the weather settled — and always remember beans should have rich, *well drained* soil. It is best to set the poles before planting; these should be six to eight feet high, rows about four feet each way. Plant four to six beans to the hill and thin to two or three, depending on the variety. If trellis is used, sow in hills about one to two feet apart in the row. A pound should plant 75 to 100 hills. A top dressing of commercial fertilizer or old manure should be worked in when cultivating.

### Asparagus Bean.

*The True Asparagus Bean* is superior to Kentucky Wonder in quality and fully equal in productiveness. The long, slender pods are very fleshy, almost round, crisp, tender and delicious, of a beautiful pale green color, attractive form and absolutely stringless. No bean equals them either for market or home use. They grow vigorously and bear heavily, the vines being literally covered with great clusters of shapely pods. Asparagus beans are profitable and heavy producers for market or garden, but owing to their fleshy pods are a difficult seed crop to produce and the demand has always exceeded the supply.

Pkt., 10c; lb., 35c; 10 lbs., \$3.00.

### London Horticultural.

#### The "Cranberry Pole Bean

Very desirable for the family garden. Vines vigorous; pods green, streaked with red. Bean large, oval, cream colored, beautifully splashed with red. Has no superior, green, shelled or dry.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50

### Kentucky Wonder.

A vigorous climber; very prolific, bearing in clusters extremely long and very fleshy, succulent pods; flat, thick and remarkably tender. A first-class pole variety.

Pkt., 10c; lb., 25c; 10 lbs., \$2.00.

### Lazy Wife.

Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless; of unusually rich flavor. Dry beans, pure white; excellent for Winter use. Pkt., 10c; lb., 25c; 10 lbs., \$2.00.

### Dutch Case Knife.

Good corn hill bean; very early; pods long and flat; beans white; used green or dry.

Pkt., 10c; lb., 25c; 10 lbs., \$2.00.

### Scarlet Runner.

A favorite as a shell bean and for its flowers, which are bright scarlet; seeds broad and kidney shaped.

Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

## Lima Beans-- Tall and Dwarf

**CULTURE.**— Lima beans require a warm, rich loam that drains well, as the seed will rot if planted in damp, cold soil. The soil must contain plenty of humus and commercial fertilizer, or well rotted manure should be worked in when cultivating. The Pole Limas require about the same treatment as other Pole Beans. The Dwarf or Bush Limas should be planted in rows two to three feet apart — six to eight inches in the row.



### Oregon Pole Lima

The only living Bean that will thrive in our cool climate.

**Oregon Pole Lima** grows a strong, thrifty vine and is very prolific, bearing continuously until frost, the blossoms bursting from the top shoots in long panicles, while the pods can be seen in every stage of development, to the matured beans at the bottom of the vine. Pods are well filled, having three to five large beans of the finest quality. Gather any time after full maturity.

**Oregon Pole Lima** can be planted in any garden soil as early as April or late as July. Give the same care and culture as other Beans, and they are ready to use when the pods are filled and first begin to ripen. It is not necessary that they should dry on the vines, except for seed.

*They are at their best when the full green pods begin to turn yellow.*

*Try "Oregon Pole Lima." It is a wonder, sure to grow, and will produce more fine beans of delicious table quality than any variety we know of.*

Price per pkt., 15c;  $\frac{1}{2}$  lb., 25c; 1 lb., 40c, postpaid.

### Burpee's Bush Lima.

Beans as large and as fine in quality as the pole varieties. It is also a heavy yielder.

Pkt., 10c; lb., 25c; 10 lbs., \$1.75.

# BEETS

**CULTURE.**—The Beet is hardy and may be planted as soon as the ground can be well prepared, doing best in rich, sandy soil, sown in rows sixteen inches apart, covered one and one-half inches deep. The seed will sprout better if soaked twenty-four hours in warm water before planting. Thin out by using the largest ones when they are of sufficient size, continuing until they are six or eight inches apart in the rows. For field crop, the rows should be far enough apart to permit the use of a horse cultivator.



## P. S. Co.'s Market Gardener.

The new, extra early Beet is remarkable for its fine quality and rapid growth; it is of deep red color and handsome shape; as an early market sort it is unrivaled. It is to a large extent superseding the Egyptian, being earlier in development, more attractive in appearance and of superior quality for the table. Market gardeners prefer it.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00.

### Detroit Dark Red Turnip.

A fine Beet for bunching for market; tops exceptionally small and uniformly upright. The roots are perfect turnip shape with small taproots. One of the deepest red beets. Quality is of the finest; sweet and tender, best beet for home gardens.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.



### Extra Early Egyptian

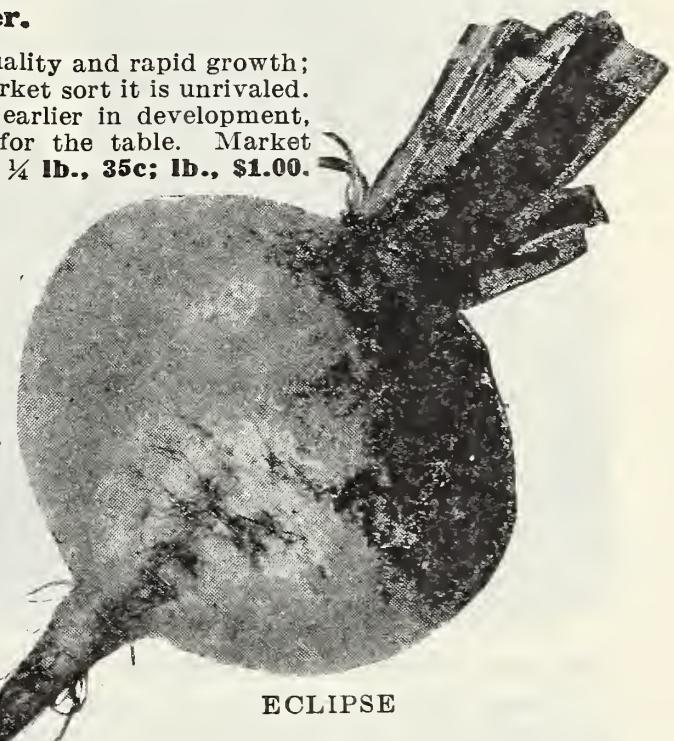
The best variety for forcing, and for market gardeners, being very early with small tops. Roots very dark red, rounded on top, but flat beneath, with very small tap roots.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

THE BEST FERTILIZER FOR BEETS IS

### Diamond No. 4

ASK FOR OUR FERTILIZER BOOK — FREE



ECLIPSE

### Early Eclipse.

One of the best early sorts. It possesses all the qualities requisite in a first-class beet, and is of a uniform, globular shape. The roots are a bright, glossy red, fine-grained and delicious.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

### Early Blood Turnip—Improved

An extra selected stock of blood turnip having larger, coarser tops and roots than the Detroit Dark Red, and requiring a longer time to mature. Excellent for Summer and Autumn use.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

### Long Smooth Dark Blood.

The leading late variety, keeping well all Winter. Should be planted in rich, warm soil to secure rapid growth, which makes them tender. Top small, root long and smooth. Flesh deep purple, fine and sweet.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., 90c.

### Half Long Blood.

A new variety of excellent quality. One of the very best for Winter use; does not become woody and keeps as well as the Long Dark Blood. The root is smooth and handsome, and the flesh is brilliant in color and as good in quality as the best Blood Turnip varieties. Give it a trial.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., 90c

DETROIT

MARKET  
GARDENER

EGYPTIAN

Three Splendid  
Varieties for Home  
or Market

# SEED POTATOES

For over 15 years we have been growing Seed Potatoes by careful selection and the varieties we offer will give you the maximum crop of salable tubers. SEE PAGES 38-39.



# BEETS

## MANGEL WURZEL

**"Sludstrup"**

and

**"Red  
Eckendorf"**

*have highest  
food value  
and are  
heaviest  
yielding  
Mangels*

### YELLOW GIANT "SLÜDSTRUP"      GOLDEN TANKARD "ECKENDORF"

These are grown extensively for stock feeding, and afford large quantities of fresh, nutritious and wholesome food during the Winter months, in connection with grain and dried forage. Sugar beets are richer and sweeter than Mangels, but the latter will generally produce one-third to one-half heavier crops per acre, and hence are preferred by many farmers.

#### Danish Sludstrup

This new Mangel comes highly recommended. Our seed is direct from the originator. We give his descriptions as follows: Long, reddish-yellow, grows well above the ground, and is easy to pull. Has repeatedly been awarded a first class certificate by the Danish Government and is doubtless the best Mangel in the world.

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.  
Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.75.**

#### Danish Red Giant Eckendorf

Is of straight, cylindrical form, very blunt, and grows mostly above the surface. Awarded a first-class certificate as a very heavy cropper.

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.  
Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.75.**

#### Improved Danish Intermediate— Taaroje—Best for Heavy Soils

Large, smooth, oval shaped mangel that grows high above the ground and is easily harvested. For very heavy soils this variety is preferable to the "Sludstrup." The food value is very high, the yield large. Special awards and first-class certificate by the Danish government.

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.  
Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.75.**

#### Golden Tankard.

Considered indispensable by many dairy farmers. They state that they are able to obtain a higher price for milk when feeding cows on Golden Tankard. Sheep thrive on it. Golden Tankard is of a rich, deep yellow throughout. Early, hardy and a heavy cropper; on account of its shape the roots can be left standing close in rows.

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 50c.  
Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.50.**

#### New Mangel Half Sugar.

A new variety, more valuable for feeding purposes than the old sorts, it being very much richer. In addition to this, the size and form have been improved until it yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots large, very smooth, with few rootlets; creamy white in color, with medium sized tops.

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.  
Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.50.**

#### Mammoth Long Red.

An improvement on the Long Red. It stands head and shoulders above all other varieties of Mangels; unequaled for yielding and feeding qualities. Grows to a very large size, and will yield 50 tons per acre with ordinary cultivation. If you want a large crop of large Mangels of good quality, don't fail to try this sort. Very uniform, smooth and of good shape. Should be grown in deep loose soil.

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 50c.  
Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.50.**

#### Yellow Giant, Intermediate, or Gate Post.

Roots very large, growing over one-half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short. We think perhaps this is the best of the yellow fleshed beets, because its fine flesh never becomes woody and its roots grow so well out of the ground that the crop is easily harvested. An enormous cropper.

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 50c.  
Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.50.**

# SUGAR BEETS

## French White Sugar.

The sort most generally grown as it combines, with heavy yield, a good percentage of sugar. It has produced 30 tons of beets to the acre, and contains from 10 to 13 per cent of sugar. The largest yields known have been obtained from this variety.

Pkt., 5c; oz., 10c; lb., 45c.

## Lane's Imperial Sugar.

This is an excellent variety and one of the best for stock feeding.

Pkt., 5c; oz., 10c; lb., 45c.

## Klein Wanzleben.

This is the variety which is considered best in Germany for producing sugar, and is now taking the lead in this country for this purpose. Our stock of seed is imported direct from one of the most careful German growers, and will give the best results.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 45c.

## Plant Sugar Beets for Dairy Cows and Pigs.

## Spinach Beet

### Swiss Chard or Sea Kale

**New Savoyed Leaf "LUCULLUS."** A wonderful new sort of "Spinach-Beet," growing about two and a half feet high. The heavy stalks are over an inch thick and bare for more than a foot of their length. The leaves make the finest of "greens." Swiss chard is hardy, easily grown and should be in every garden. It is one of the most delicious of all vegetables.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c

## Brussels Sprouts

*The plants, which are very hardy, grow two or three feet high, and produce, from the sides of the stalks numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the Fall, to give the little heads more room to grow. They should be treated in all respects like Winter cabbage or kale.*

### Odense Market

An improved Danish variety, producing in greatest abundance firm, shapely sprouts, thickly set around the entire stalk; will stand a severe Winter, and is unsurpassed for market or home garden.

Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c.

### Dwarf Improved

A carefully grown strain, very hardy and giving compact, round sprouts of large size and good quality.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 35c.

## BROCCOLI or Winter Cauliflower

Broccoli is very much like cauliflower in general appearance and growth, but is hardier and will stand more cold and frost. Produces fine heads from late in the Fall until early Spring, according to time plants are set out. It is a very profitable crop, and is now being planted extensively. Culture same as for late Cauliflower.

### St. Valentine The Finest of All Broccoli.

This grand new strain introduced by us is a sure header of immense size, finest quality, and is ready for market in February. The large, solid, handsome, white heads remain in good condition longer than other varieties.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c; 1 oz., \$1.25.

### Large White French.

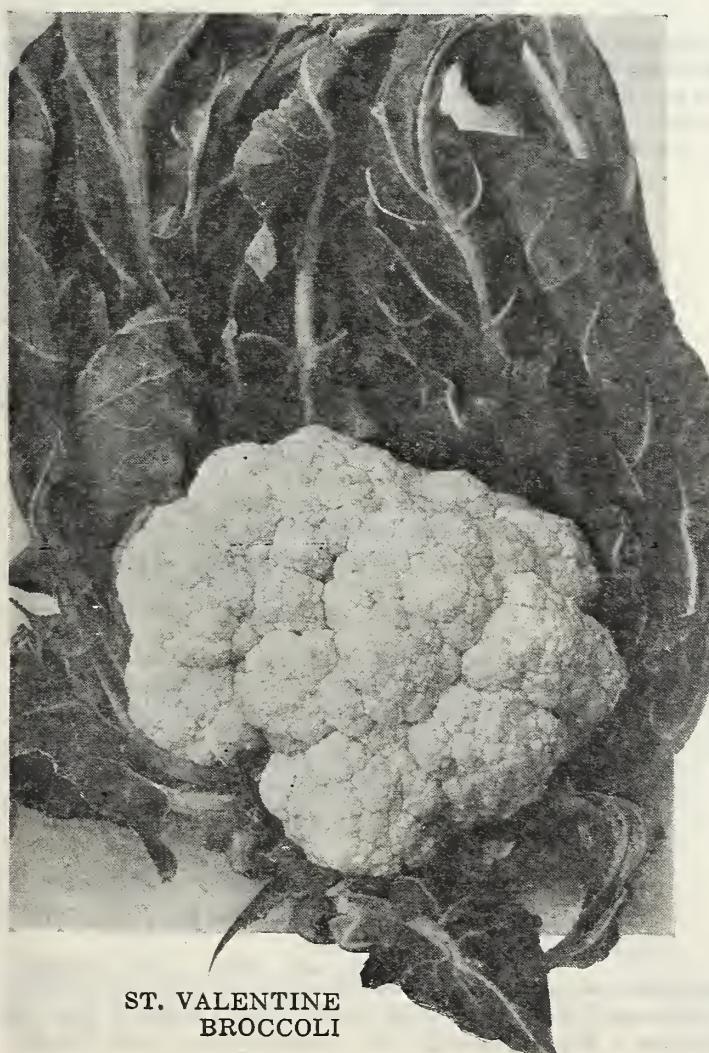
A valuable variety with large, white heads, firm and of good flavor.

Pkt., 5c; oz., 65c;  $\frac{1}{4}$  lb., \$1.50.

## Vegetable Plants

Thrifty, well grown, true to name. Standard varieties in any quantity for seasonable delivery. SEE PLANT DEPT.

ST. VALENTINE  
BROCCOLI

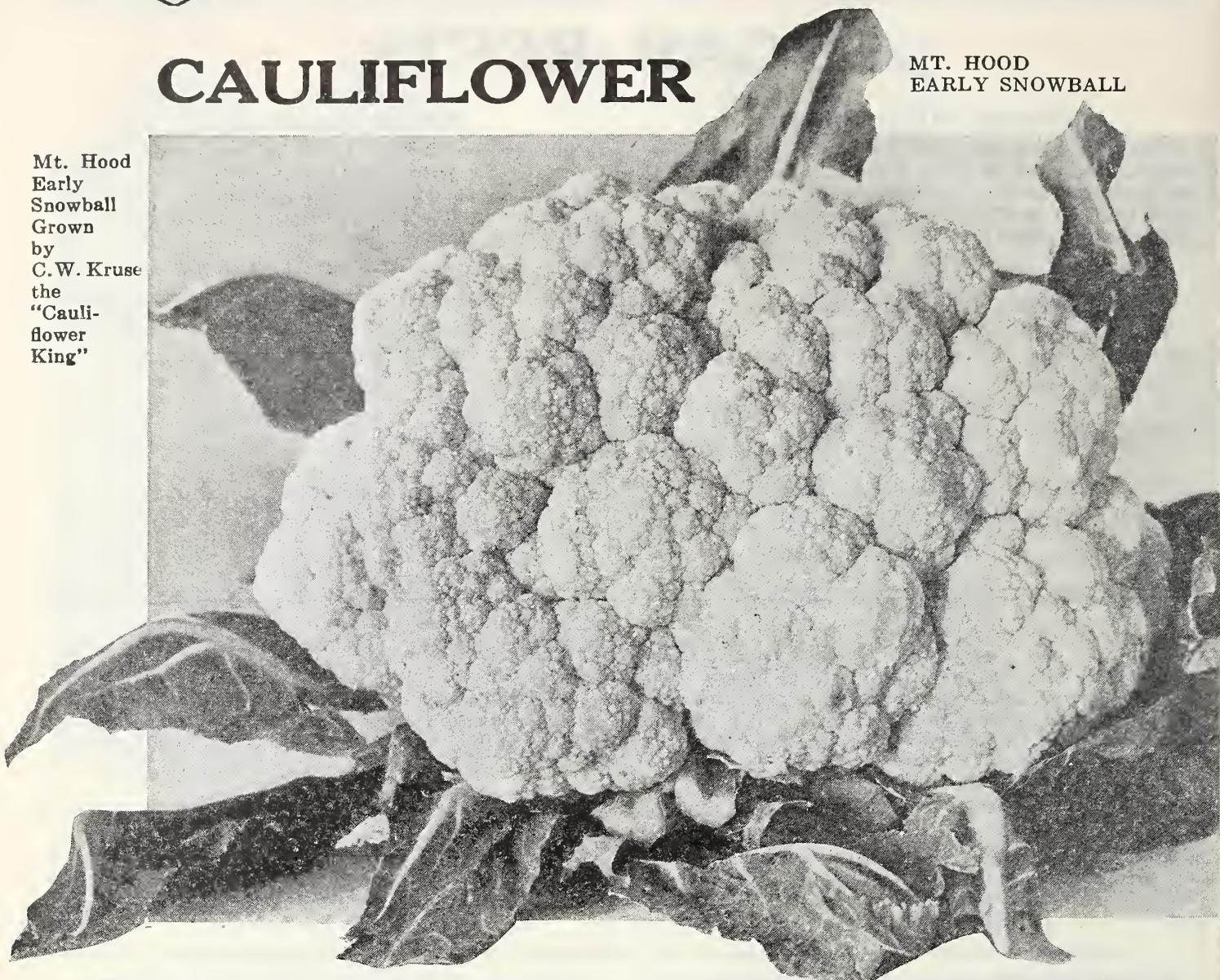




# CAULIFLOWER

Mt. Hood  
Early  
Snowball  
Grown  
by  
C. W. Kruse  
the  
"Cauli-  
flower  
King"

MT. HOOD  
EARLY SNOWBALL



**CULTURE** — The Cauliflower succeeds well in any soil where cabbage will grow. But best results are obtained in rich loam with an abundance of water. By sowing early varieties in a hot bed in February or March, or later in a cold frame, fine heads can be obtained quite early. For a later supply, sow seed in a prepared bed in May, choosing a cool, moist place. When large enough, transplant, making the rows about two and a half feet apart and eighteen inches between the plants. In dry seasons the crop must be watered.

## P. S. Co.'s "Mt. Hood" Early Snowball

The seed that produces those handsome large white solid heads that bring big profits to the gardener. We offer our "Mt. Hood" Cauliflower seed in sealed packets only, under our own label, it having been carefully selected and grown for us by one of the very few expert Cauliflower growers, and is the best strain of Early Snowball obtainable. We especially recommend "Mt. Hood" Snowball for either early or late planting.

Pkt., 25c;  $\frac{1}{2}$  oz., \$1.50; oz., \$2.50.

## Selected Extra Early Dwarf Erfurt

Remarkable for reliability in heading. Very dwarf, with solid, pure white heads of superior quality. If planted the first of March, heads nine to twelve inches in diameter will be ready early in June.

Pkt., 5c;  $\frac{1}{4}$  oz., 65c; oz., \$2.00.



## Early Snowball.

Ordinary strain. This is the regular grade of Early Snowball that is generally offered, and while it will not give as good results as "Mt. Hood," can be depended upon to produce a good crop.

Pkt. 5c; oz., \$2.00;  $\frac{1}{4}$  lb., \$6.00.

## Danish Giant,—Dry weather Cauliflower

Danish Giant is an early, large, solid white Cauliflower that can successfully withstand a drouth that would prove fatal to other varieties and will thrive splendidly in dry sections, being peculiarly adapted to their growing conditions, but like all cauliflower must have rich soil and cultivation to give best results. Danish Giant can also be grown under moist conditions and is a dependable market variety. If your location is subject to drouth or you are "dry farming," be sure to plant Danish Giant.

Pkt., 20c;  $\frac{1}{4}$  oz., 60c; oz., \$2.00;  $\frac{1}{4}$  lb., \$6.50.

## Large Algiers.

A valuable late sort, sure to head, of the best quality and very popular with market gardeners everywhere. Plants large, but of upright growth, the leaves protecting the heads so that they will endure, uninjured, a frost that would ruin other sorts. One of the very best of the late varieties.

Pkt., 5c; oz., 75c;  $\frac{1}{4}$  lb., \$2.50.

## Autumn Giant.

The heads are white, large, compact and thoroughly protected by foliage.

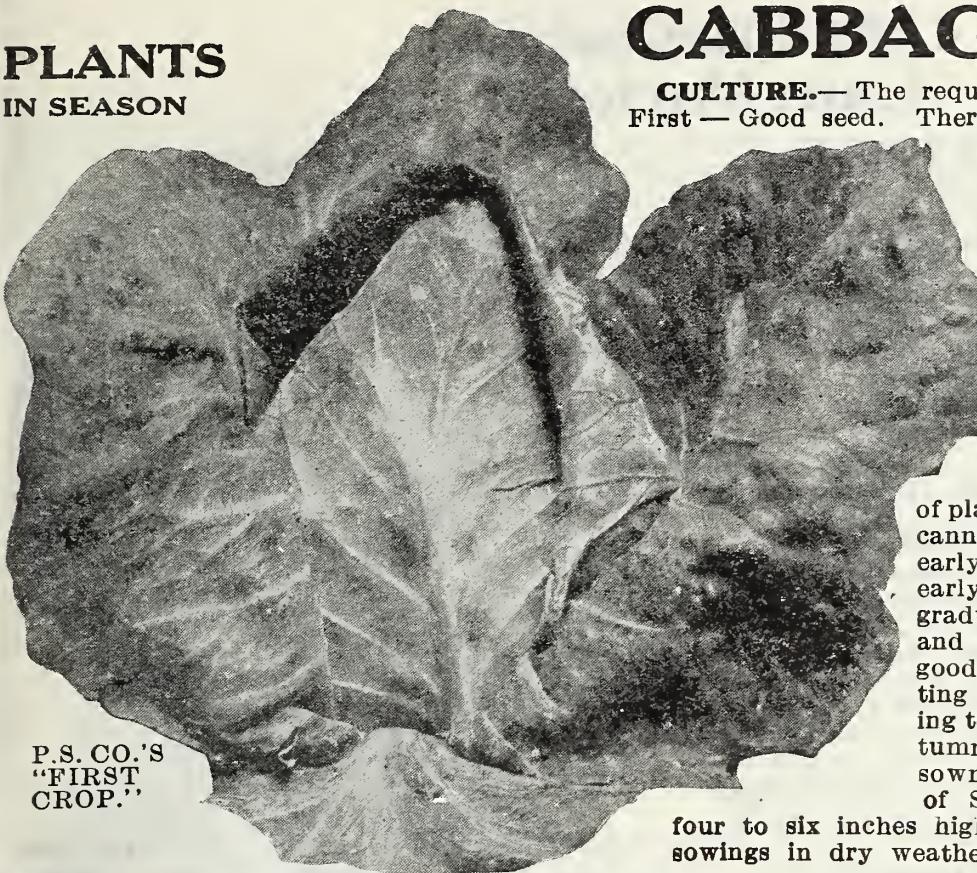
Pkt., 5c; oz., 75c;  $\frac{1}{4}$  lb., \$2.00.

**DON'T BUY**

cheap strains of Cauliflower Seed. Only the best select strains can be depended upon to produce a big percentage of large, white, solid heads.



**PLANTS  
IN SEASON**



P.S. CO.'S  
"FIRST  
CROP."

**It is important that the plants should not be crowded in the seed bed, or they will run up weak and slender and be likely to make long stems.**

**P. S. Co. First Crop.  
The Ideal Early Cabbage**

*The earliest of all pointed varieties and an ideal sort for the private or market gardener.*

*First crop being ten days ahead of any other cabbage, takes but little room, and produces fine, solid heads. We advise all our customers to try this new variety for we believe it is a sterling novelty of the greatest value.*

**Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 60c.**

**Early Jersey Wakefield.**

*The favorite Early Cabbage with our market gardeners. A sure header. The thick, stout leaves and compact habit make it the best for Wintering over and very early setting.*

*Grown more extensively for market than any other early cabbage. Is always of good size, very solid, and has but few outside leaves; a reliable header and always gives good satisfaction.*

**Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

**EARLY DWARF FLAT DUTCH.** Grows low on the stem; a sure header; firm, fine grained, tender and excellent.

**Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

**Early Winnigstadt.**

A desirable variety, having conical, solid heads; a sure header under almost any conditions, and keeps better than most early varieties. Fine appearance and of excellent quality.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

**SUCCESSION, OR ALL SEASONS.** Heads large, slightly flattened; grows low on the stem.

**Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

# CABBAGE

**CULTURE.**— The requisites for complete success are: First — Good seed. There is no other vegetable where the seed has so much influence on the quality of the product, and gardeners should always use the best procurable. Second — Rich, well prepared ground. Third — Frequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deeply. Cabbage is universally grown and specific directions regarding the time and method of planting applicable to all localities cannot be given. In general, the early sorts should be sown very early in hot beds, hardened off by gradually exposing to outside air, and as early as the ground is in good condition, transplanted, setting 18 to 36 inches apart, according to size of variety. The late Autumn and Winter varieties may be sown from the middle to the last of Spring and transplanted when four to six inches high. Shade and water the late sowings in dry weather to get them up.



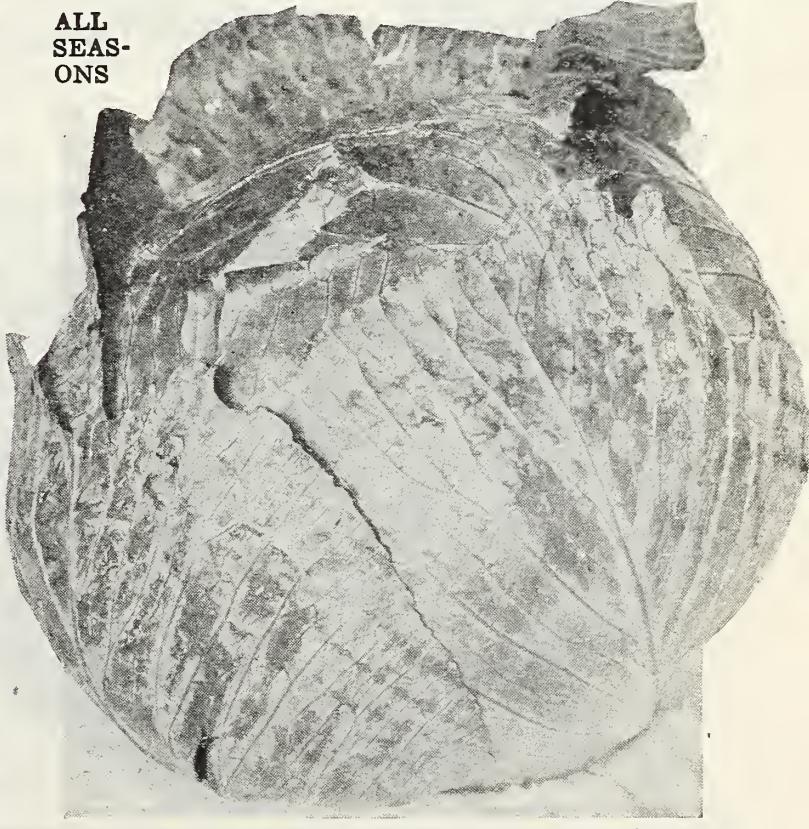
## Copenhagen Market

### A Splendid Cabbage for Home Gardens

A new extra early globe-shaped Cabbage slightly flattened. The large solid heads are very uniform, with few outer leaves, keeps well and stands handling. *Copenhagen Market* originated in Denmark, where it is the favorite market variety, and we recommend it to our customers as the best early round head. Gardeners should give it a trial. Our stock is direct from the originator.

**Pkt., 15c; oz., 35c.**

**ALL  
SEAS-  
ONS**



## Cabbage Plants

Well grown stocky plants, properly hardened off—all standard sorts in season. Prompt deliveries at right prices. SEE PLANT DEPARTMENT.



## CABBAGE--Continued

### Late Varieties

#### Diamond Ball Head

An improved Danish Ball Head, re-selected for many years by our grower, who has been successful in securing a perfect late market sort of just the right size and finest quality. Heads are a little flatter than the older strain and stems shorter, color lighter green, but showing the characteristic reddish veins on the outer leaves. Solid, crisp, and of remarkable uniformity; market growers will get more perfect salable heads from "Diamond" Ball Head than from any other late cabbage.

Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.50.

#### Danish Ball Head or Hollander.

This is one of the hardiest cabbages in cultivation and endures both frost and drouth that would destroy other varieties.

Plants rather long-stemmed, but compact; leaves very smooth, but thick; head of medium size, round and very solid, being *the hardest heading cabbage we know of, and of the very best quality*. Matures quite late, keeps well, and is considered by many the best cabbage to hold over for Spring markets. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.

#### Danish Round Head

A round as ball shaped cabbage of great solidity. Color, rich dark green, has few outer leaves, is very hardy and is a profitable late market variety.

Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.50.

#### Premium Late Flat Dutch.

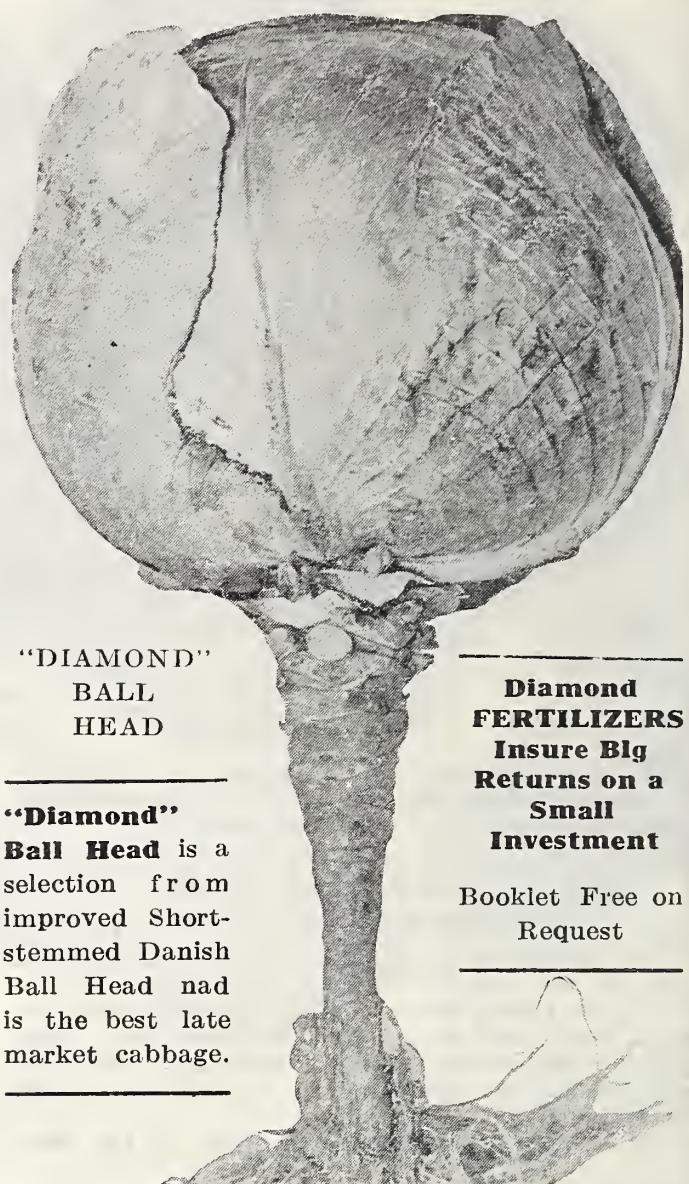
This is superior to any other late cabbage in cultivation, when large areas are planted for shipping. It possesses all the good qualities of the Late Flat Dutch, and is a sure header.

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.65.

#### CHARLESTON, OR LARGE WAKEFIELD.

Large and a little later than the Early Jersey Wakefield

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.



**Diamond FERTILIZERS**  
Insure Big Returns on a Small Investment

Booklet Free on Request

#### BUG DEATH!

A NON-POISONOUS INSECT POWDER

For use on

Cabbage, Tomatoes, Cucumbers, etc.  
Market Gardeners use 12 lbs. per acre.

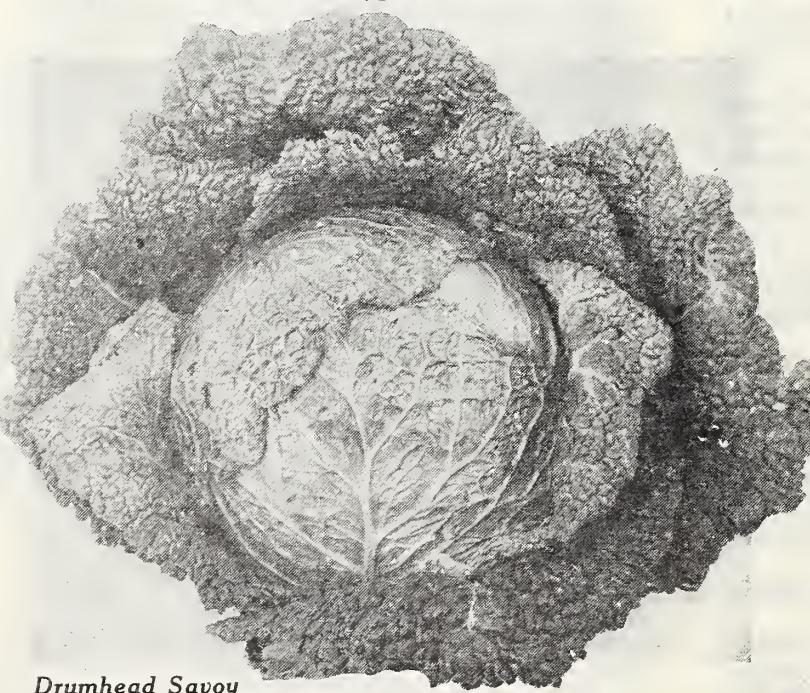
1 lb., 15c; 5 lbs., 65c; 100 lbs., \$10.00.

#### Red Cabbage Odense Market

Used for pickling. The heads are very fine and remarkably sure heading.  
Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

#### Savoy Cabbage Vertus—Late Savoy

Large, compact heads; crisp and tender with a rich flavor. Desirable for cooking or salads.  
Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.



If you grow cabbage, kale, cauliflower, celery—*you need a MASTER'S PLANTER*  
Price \$4.50. Endorsed by the Washington State Experiment Station, Bulletin No. 6.

# CARROTS

**C**ARROTS, aside from being one of our most useful and easily grown garden vegetables, are invaluable for stock feeding. They are greatly relished, promote health and put a sleek coat on cattle or horses, giving a well-kept appearance. Dairy and stockmen should grow them extensively. For their special use we recommend our Yellow Giant.

**CULTURE.**—A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the Spring as the ground is fit to work, though good crops may be grown from sowing as late as June 15. For table use, sow the smaller kinds in rows 16 to 18 inches apart, and for field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see to it that the soil is well firmed above the seed.



CHANTENAY



### Earliest Short Horn, or French.

The earliest variety in cultivation, and best suited for forcing. Roots, reddish brown, globular and about two inches in diameter; should be used before full grown.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00.



### Early Scarlet Horn

The best early kind for general use. It is larger than the forcing variety, but fully as good in quality, and produces a much larger crop.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., 90c.

### Oxheart.

A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.



### Chantenay.

#### The Market Gardener's Favorite.

Tops, medium sized; necks, small; roots, tapering slightly, but uniformly stump-rooted and smooth; color, deep orange red; flesh, very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any; is a heavy cropper, and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Danver's Half Long,

Grown largely on account of its productiveness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, handsome roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts, and are more easily harvested.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

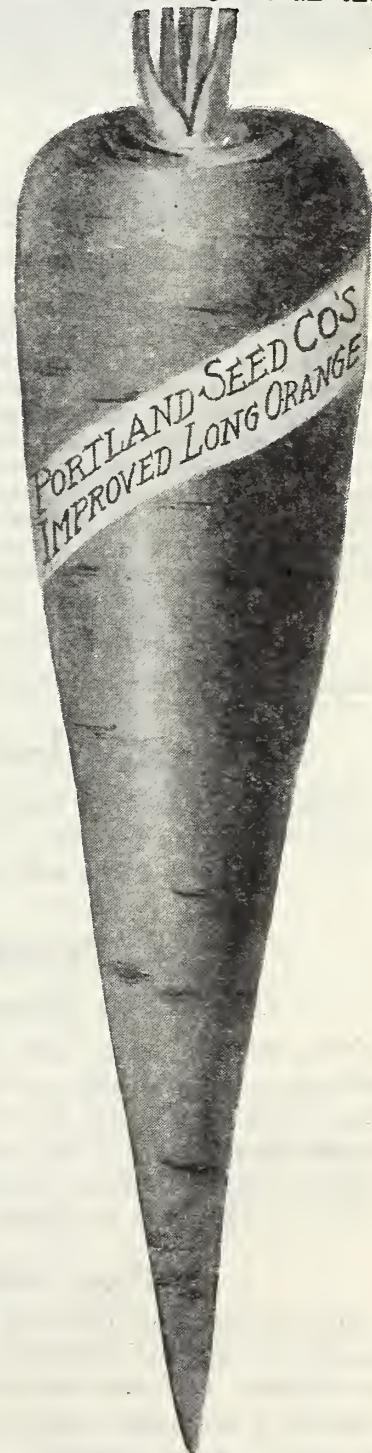
### St. Valery.

A popular French Carrot of a deep, rich orange red color, with very straight roots, broad at the top and tapering abruptly near the point. Average length 10 to 12 inches, foliage small. The table quality is excellent and the fact that it yields heavily in light soil makes it useful as a stock carrot. We consider it a valuable variety.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Portland Seed Co.'s Improved Long Orange.

Popular for farm use on deep, mellow soil. Our stock is an improvement obtained by years of careful selection of the best formed and deepest colored roots, which grow to a large size, some specimens averaging twelve inches in length. Enormous crops can be grown under fair culture; one of the best varieties for feeding stock. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 65c.



### USE DIAMOND No. 1 FERTILIZER FOR CARROTS.

Our Book "FERTILIZERS" tells you how to profitably use fertilizer. Tells you what you should get for your money when you buy Fertilizers—a book every grower should have and is FREE FOR THE ASKING

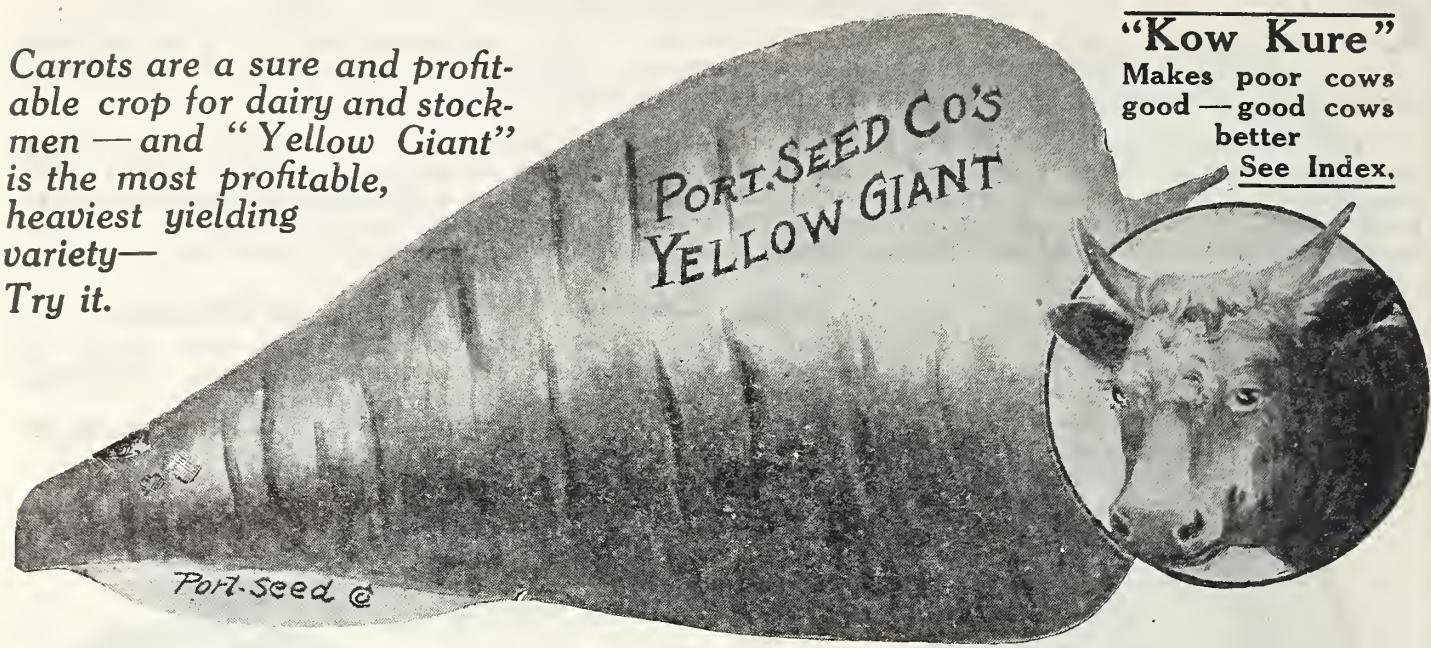


## CARROTS—Continued

# Good and Productive Stock Carrots

Carrots are a sure and profitable crop for dairy and stockmen—and “Yellow Giant” is the most profitable, heaviest yielding variety—

Try it.



### Portland Seed Company's Yellow Giant

Specially Adapted to Moist, Heavy Soils

This new Carrot originated at the Sydney, Australia, Experimental Station, and has proved itself to be the **earliest and most productive stock carrot offered to date**. It is a half long variety, with an **immense broad shoulder**. The Carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is of bright yellow, and is **perfection itself** for giving the proper color to butter. Every dairyman who wants a big crop of carrots of the right quality and **easy of culture** should plant our Yellow Giant.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Chervil---Curled.

This plant is used for flavoring soups and salads, and has a strong perfume.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c.

### Cress

#### Curled, or Pepper Grass.

This salad is much used with lettuce, to which its warm, pungent taste make an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

#### True Water.

One of the most delicious of small salads, and should be planted wherever a suitable place can be found. The seed should be sown and lightly covered in gravelly, mucky lands, along the borders of small, rapid streams. Under favorable conditions they increase very rapidly by self-sown seed and extension of the roots.

Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.00.

**“Kow Kure”**  
Makes poor cows good—good cows better  
See Index.

### Improved Short White—“Mastodon” Of Excellent Table Quality

Ranks as a field carrot, owing to its enormous productiveness and the ease with which it can be harvested. Roots half long, smooth, very heavy at the shoulder, but tapering regularly at the point; color, light green at the crown, white below; flesh, rich, white, solid, crisp and of excellent flavor. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

#### Large White Belgian.

Extensively grown for stock feeding; very productive. Grows so much above the ground that the entire crop can be pulled by hand.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

#### Yellow Belgian.

Large root; yellow flesh; good keeper for late feeding. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Corn Salad

*Fetticus, or Lamb's Lettuce.*

A refreshing salad, used extensively in Winter and Spring as a substitute for lettuce. It is often cooked like spinach. Sown in drills one foot apart, in the Spring or Fall. On the approach of cold weather cover over with straw or coarse litter.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Collards True Georgia.

Used as “Greens” mainly in the South and West. As the leaves are pulled off, others grow in their places.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c.

### Chives

See Vegetable Plant List  
We supply all vegetable plants in season.

### Chicory

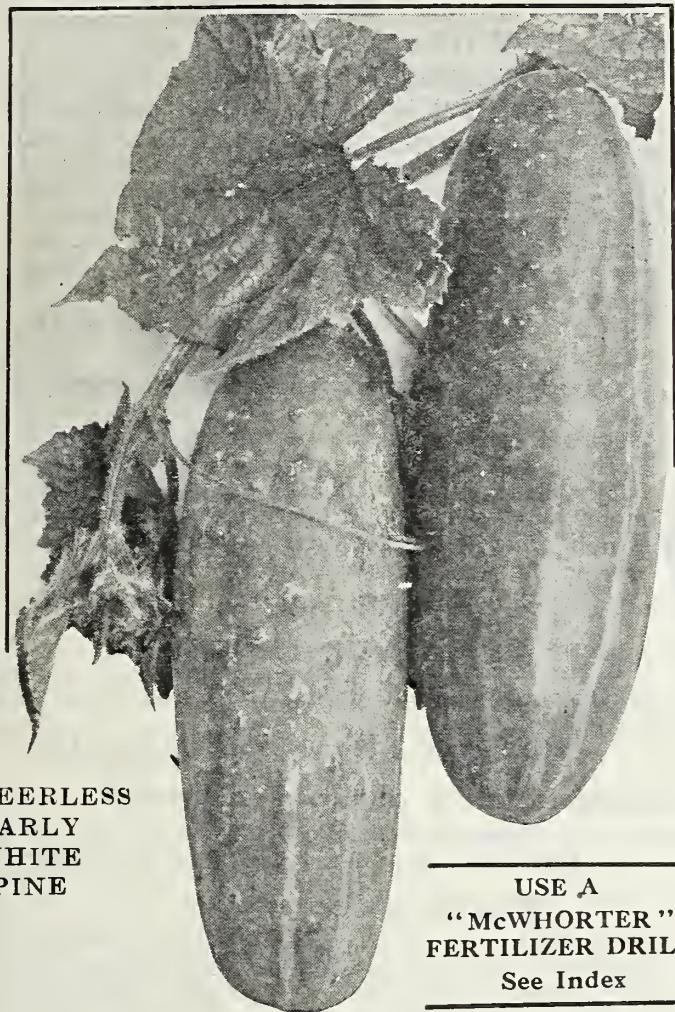
Extensively used to adulterate coffee and as a substitute for it. The culture is the same as for carrots. Dig at about the same time as carrots, wash, slice and dry by artificial heat. The blanched leaves are used by some for salad.

**LARGE ROOTED OR COFFEE**—The best kind.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

# CUCUMBERS

**CULTURE.**—Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills four feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, whether required for use or not, as their ripening soon destroys the vine's usefulness.



### "The Davis Perfect" Cucumber.

The "Davis Perfect" is of perfect form, large size and of the finest color; is crisp, delicious and almost seedless.

The "Davis Perfect" is as handsome, grown outside, as any hothouse Cucumber.

Mr. Davis is the originator of the Davis Wax Bean and the Grand Rapids Forcing Lettuce. His Cucumber is equally valuable.

Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00.

### Telegraph.

#### Forcing

A standard forcing variety, very popular with gardeners. Fruit fourteen to sixteen inches long, of very fine quality. A sure and heavy cropper.

Pkt., 25c.

### Early Russian.

Earliest and hardiest. Very vigorous and productive. Fruit three to four inches long, thick, oval, pointed at each end, and covered with fine, small spines. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Gherkin For Pickling.

A very small, oval, prickly variety, quite distinct from all others. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c.

### "Diamond" Long Green.

The leading large variety. Fruit from ten to twelve inches long, dark green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles. We offer our "Diamond Strain"—they will grow long and uniform in shape. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Peerless, or Early White Spine.

One of the best sorts for table use, fruiting early and abundantly. Fruit uniformly straight and handsome; light green, with a few white spines. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 70c.

### Boston Pickling, or Green Prolific.

Color, bright green, and a great producer. The fruits average four to five inches in length when large enough for slicing, and are of excellent quality, but it is for producing medium sized pickles that this variety is so highly esteemed.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 70c.

### Cumberland Pickling.

The vines are hardy, strong, and fruit very freely. The straight young fruits possess the distinctly roughened surface so much desired for small pickles. The large fruits average nine to ten inches in length, two and a half inches in diameter, with full rounded ends, and are of good quality for slicing.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Lemon Cucumber.

This dainty little cucumber resembles a lemon both in form and color, having a distinctive flavor superior to and not found in any other cucumber. The Lemon Cucumber is so prolific that a single vine will be ample for the needs of the average family. It is also said that the Lemon Cucumber can be eaten without fear of the harmful results that some experience from eating cucumbers.

Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.00.

### Early Cluster.

Fine, vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. A very productive sort.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Short Green, or Early Frame.

An excellent sort for both table use and pickling. Fruit straight, small at each end, bright green, with crisp, tender flesh. Comes into use a little later than the Early Cluster and keeps green a long time. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Japanese Climbing.

A useful variety for growing on a trellis or wire. The cucumbers are long, of a dark green color, white flesh, crisp, and of a good flavor.

Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 50c.

 For Cucumbers "DIAMOND No. 10" will repay its cost many times over. Let us send you our FREE BOOK "FERTILIZERS"



# CELERY

**CULTURE.**—Sow the seeds early, about February, in a hot-bed or cold frame. When three inches high, transplant, setting them four inches apart. When grown six inches, and fine, stocky plants, set in richly manured, deep soil, in rows three and a half feet apart and about nine inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Blanche by placing boards along the rows, or earth up a little, and continue doing so at intervals until only the tops of the leaves are visible late in Autumn. **Never hoe up the earth when plants are wet.** One ounce of seed produces about six thousand plants. **SEE FOOTNOTE.**



## White Plume.

### The Leading White Celery

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white, so that by closing the stalks either by tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of "banking" or "earthing up." It is the earliest celery known.

**Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c; lb., \$1.75.**

## Golden Yellow Self-Blanching.

This is no doubt the best celery for early Spring market use. Plants of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier.

**Pkt., 10c; oz., 75c;  $\frac{1}{4}$  lb., \$2.50.**

## Large White Solid.

Of vigorous growth, white, crisp, tender; fine, nutty flavor.

**Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$1.75.**

## Golden Heart, or Golden Dwarf.

Solid; of fine, nutty flavor; excellent.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

## Winter Queen

This is without doubt the most valuable variety of celery for Winter and Spring use ever introduced. Has double the amount of heart of any known celery. The plant has a fine appearance, of compact growth, and blanches to a beautiful cream-white. Ribs perfectly solid, crisp and a delicious nutty flavor.

Stored for Winter or Spring use, it is an excellent keeper and when taken out the blanched stalks will be firm and crisp; entirely free from strings; brittle and of sweet flavor.

**Pkt., 10c; oz., 35c; 2 ozs., 65c;  $\frac{1}{4}$  lb., \$1.00.**

## Giant Pascal.

Largest variety grown; of fine, nutty flavor; very easily blanched.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

**Celery Seed.** For flavoring  
**Oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 50c.**

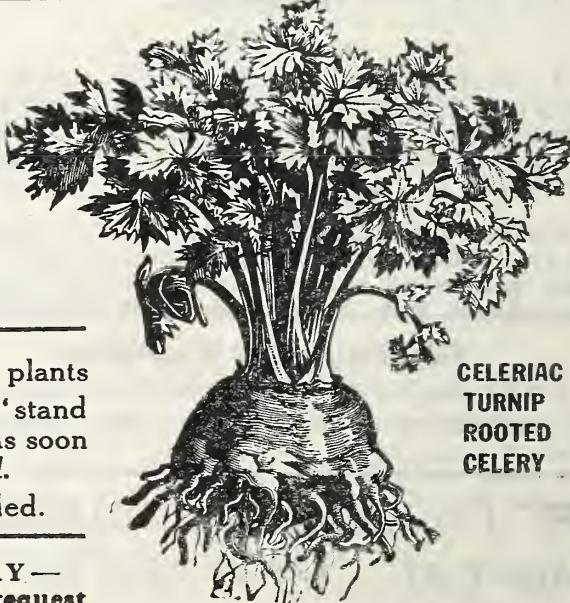
## CELERIAC

Turnip Rooted Celery

Large Smooth Prague

Improved form with very few side roots. The largest and best variety.

**Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c.**



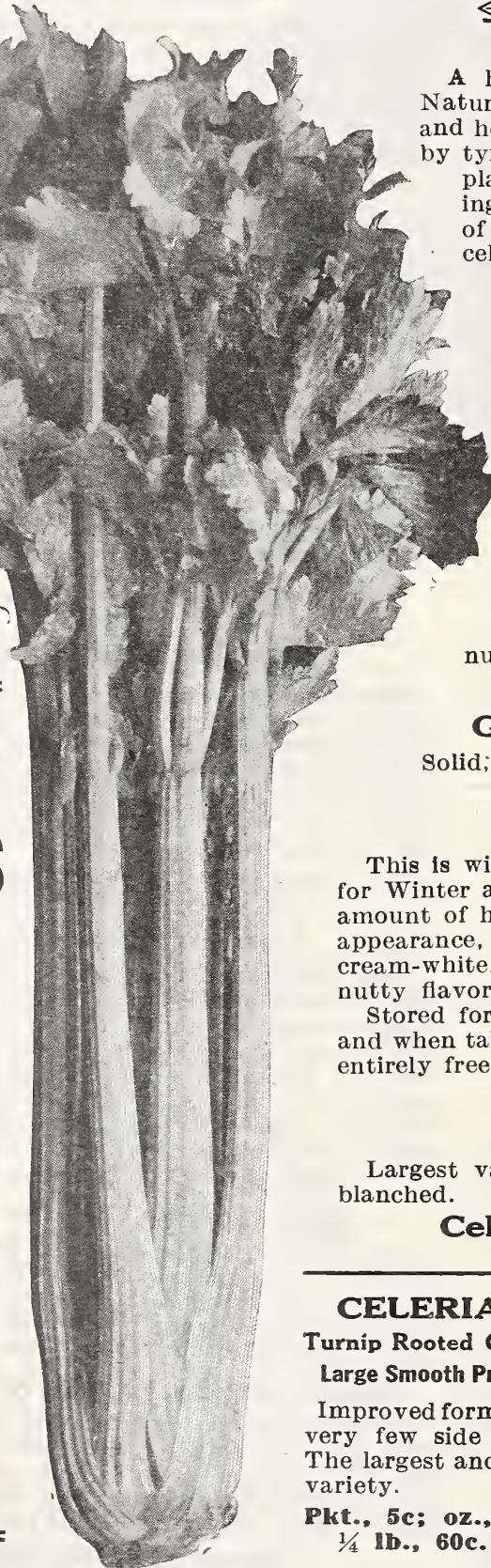
CELERIAC  
TURNIP  
ROOTED  
CELERY

WHITE PLUME

# CELERY PLANTS

Large  
Healthy  
Transplanted  
Plants in  
Standard  
Varieties  
for  
Delivery in  
Season.  
Any Number  
at  
Right Prices.

See  
Plant  
Department



## To Succeed with Celery

you must keep your plants growing constantly while young, if you allow them to "stand still" they will run up to seed later. Always cultivate as soon after watering as the ground is dry enough to work well.

Fertilize heavily in the spring—and use nitrate later if needed.

**No. 4 DIAMOND FERTILIZER FOR CELERY—**  
Read our Fertilizer Book. Mailed free on request

# SWEET CORN

**CULTURE.**—Corn should not be planted until the ground is warm, as the seed will rot in cold, damp soil, or if planted too deep. Late April is early enough for first plantings and for succession plant every two weeks through May and June. Cover the first planting very lightly, increasing the depth a little for the later plantings. For the Dwarf Early varieties, rows should be three feet apart; for later large varieties, four feet, and the hills two to three feet in the rows.

**Sweet or Sugar** varieties are used both for table and stock feeding, some of the large later sorts being preferred for silos and fodder.

**Field Varieties** are grown for fodder and for ensilage in the Pacific Northwest more than for grain, but of recent years improved early varieties have given good results and splendid crops are reported from many sections where it was thought corn could not be grown.

 **Add 10c to lb. Price for Postage on Corn.**



## GOLDEN WEST—Oregon Grown Seed

Illustrated on Front Cover.

*The richest, sweetest corn ever grown*—To be sure of the right strain, look for our Diamond trade mark on every package.

Our "Golden West" Corn, a selection from the original strain of Golden Bantam, produces a larger ear has a more vigorous growth, and by continued careful selection, improves yearly. We believe it to be the richest, sweetest, best yielding early sweet corn nothing having ever been produced that will compare with it in any way. **Golden West** is extremely hardy, can be planted earlier than other varieties, and, being of dwarf habit, can be planted closer than other sorts. It is the very best corn for market or home gardens, where earliness and quality are considered. The color is a rich, creamy yellow, deepening to golden as it matures, and the quality is so fine that you must try it to appreciate how good corn can be.

**Pkt., 10c; lb., 20c; 10 lbs., \$1.50.**

## Oregon Evergreen—Oregon Grown Seed

We offer **Oregon Evergreen** as the finest main crop Sweet Corn. The flavor and sweetness can not be excelled and the extreme whiteness of the large ears makes it very beautiful and valuable for canning. It is large and the stalks produce more ears than any other variety and have a very heavy husk over the grains, protecting them from insects and keeping the ear fresh a long time after cutting.

**Oregon Evergreen** is a hardy, vigorous grower and is the ideal Corn for market gardeners.

**Pkt., 10c; lb., 20c; 10 lbs., \$1.50.**

## Livingston's Early Sugar

A grand new "dry weather" corn. Even after severe drouth, the stalks look as fresh and green as in the Spring and the ears are well filled and perfect. In favorable seasons it will produce ears fit for table in 60 days from planting. Ears averaging 7 inches long contain from 12 to 14 rows of deliciously sweet, pure white kernels on white cob.

**Livingston's Early Sugar** does not stool, but produces strong, sturdy plants which resist wind admirably. They stand up well, average 6 feet tall and furnish an abundance of fine fodder.

**Pkt., 10c; lb., 25c.**

## Early Minnesota—Oregon Grown.

This old and deservedly popular variety is one of the best early sorts for the market and the private garden.

**Oregon grown seed, Pkt., 10c; lb., 20c; 10 lbs., \$1.35.**

**Northern Grown, Pkt., 10c; lb., 15c; 10 lbs., 90c.**

## Stowell's Evergreen.

Remarkable for remaining a long time in a fresh condition suitable for the table. Hardy and productive, and the best late variety for general use.

**Pkt., 10c; lb., 15c; 10 lbs., 90c.**

## Well-Known and Standard Varieties.

 **All varieties 10c per packet, postpaid.—Add 10c to pound price if wanted by mail.**

**ADAMS' EXTRA EARLY.** Not sugar corn; small ears for early use.....**10c**  
**BLACK MEXICAN.** Black grains, sweet and delicious; fine for home use.....**15c**

Per lb.	Per 10 lbs.
	\$0.90
	1.00

# Remember

THE RICH FLAVOR AND SWEETNESS OF CORN DISAPPEAR  
QUICKLY AFTER GATHERING AND TO BE AT ITS BEST SHOULD  
BE USED AT ONCE.



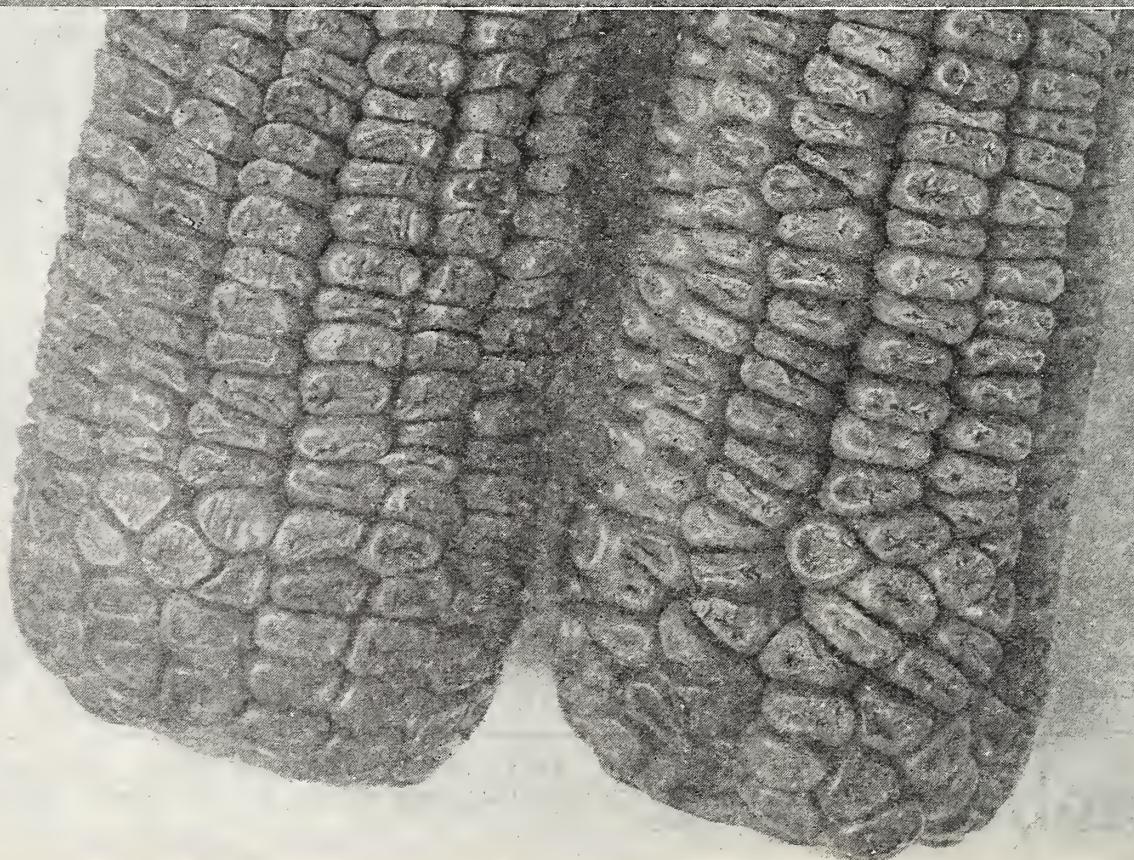
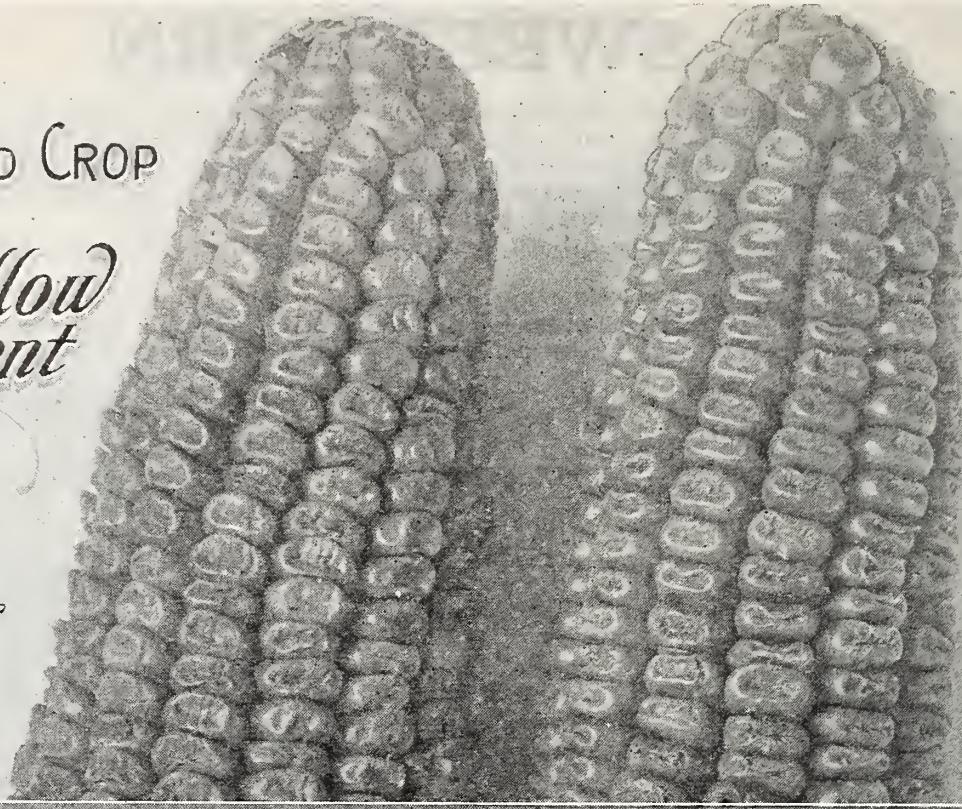
1915 SEED CROP

Premium Yellow Dent

FIELD  
CORN

GROWN NEAR  
PORTLAND

See opposite page



## Field Corn

HERE is no longer any doubt as to Corn being grown successfully in the Northwest, and careful tests have proven the following to be dependable and profitable. As a fodder crop corn cannot be excelled and cut green and packed in silos it makes a valuable green feed for milch cows.

The past season was a good corn year in the Pacific Northwest and there is much enthusiasm expressed at this time over the future possibilities of corn growing.

Of the many varieties tested Minnesota No. 13 and Northwestern Dent have given encouraging results and we have added them to our list of varieties that seem best adapted to this section.

 Pound prices on Corn do not include postage: add 10c extra per pound if wanted by mail.

### Premium Yellow Dent ILLUSTRATED ON OPPOSITE PAGE.

Premium Yellow Dent is a cross of Yellow Flint and a big early Yellow Dent Corn, combining the earliness and hardiness of the Flint with the good qualities, large ear and vigor of the Dent. The ears are very large, often two and three on a stalk, and the stalk grows large with luxuriant foliage, making a splendid fodder or silo corn; but its great value lies in the grain production, the big yellow ears maturing early and curing up hard and dry. Premium Yellow Dent has been grown in Oregon and Washington for many years and is specially suited to our climate.

Price: 1 lb., 15c; 10 lbs., 85c.

### Hartman Yellow Dent GROWN IN OREGON FOR 22 YEARS.

Hartman Yellow Dent has the endorsement of "Farmer Smith" of the O.-W. R. & N. Co., and samples were distributed along their line for trial and demonstration purposes.

Hartman Yellow Dent represents 22 years of careful reselection and has developed into a hardy heavy yielding corn that thrives in the Willamette Valley, maturing a big crop early, and has the unusual habit of maturing the ears while the stalk remains green, so that it can be cut for fodder or silo when the grain is harvested. Cob is small, ears medium to large, stalk light, allowing close planting.

Price: 1 lb., 15c; 10 lbs., 80c.

### Minnesota No. 13 Yellow Dent

A variety of great promise, being the earliest of the early yellow dent corns and reported to be the heaviest yielding. Producing splendid large ears, closely filled from end to end with bright yellow kernels. Has rather a thick cob and the shelled grains have a tendency to irregularity. **Minnesota No. 13** will average 7 feet high and being a rapid, vigorous grower, with heavy foliage, makes a fine fodder corn. Will mature in 90 days under favorable conditions.

Price: 1 lb., 15c; 10 lbs., 80c.

### Northwestern Dent "Smoky Dent"

This is a red corn with yellow dent or cap and in high altitudes and the Northern sections where seasons are short will often mature a crop when other varieties fail. Its extreme earliness and rapid growth make it valuable for late planting and for replanting. Ears are 7 to 10 inches, closely filled; grows 7 to 8 feet high. Of 40 varieties on trial reported at the Montana Experiment Station, Northwestern Red Dent was in the lead with yields as high as 63 bushels per acre.

1 lb., 15c; 10 lbs., 75c.

### Champion White Pearl.

A large, white dent variety; very popular with our dairymen on account of the great amount of green feed it makes.

1 lb., 10c; 10 lbs., 50c.

## Well Known and Standard Varieties

 ALL SORTS OF FIELD CORN 10c PER PACKET; PRICES PER 100 POUNDS ON REQUEST

EARLY CANADA (Flint). An eight-rowed Yellow Flint Corn; early and very productive.....	Per lb.	Per 10 lbs.
	10c	\$0.60
KING PHILIP. An early Red Flint Corn; well acclimated and well known.....	10c	.60
LEAMING (Early). Yellow Dent; grain small; weighty; productive.....	10c	.50
EARLY WHITE FLINT. Productive, early and of beautiful appearance.....	10c	.50
WHITE RICE. Pop Corn. Best variety for popping corn.....	10c	.75



BLACK BEAUTY

## EGG PLANT

Should be started in a hotbed and transplanted when the weather is settled and the ground thoroughly warm. They will thrive with the same treatment as that given the tomato.



### Black Beauty

An extra early, quick-growing, vigorous variety, handsome and very uniform. Color, deep blackish purple. Splendid market sort.

Pkt., 10c; oz., 50c;  $\frac{1}{4}$  lb., \$1.50; lb., \$6.00.

### New York Improved, Large Purple.

The leading market variety. Large, round, dark, excellent and the most productive.

Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., \$1.00.

## ENDIVE

This is a hardy vegetable, cultivated principally for a Winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.

### Broad Leaved Batavian (Escarolle)

Has broad, thick leaves, which form a large, loose head.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c.

### White Curled.

A beautiful variety, with curled, mossy leaves, for early use.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c.

### Green Curled.

Standard sort for Fall and Winter.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c.

## GARLIC

Garlic is produced from sets in same manner as "multiplier onions" dividing the little clump planting each bulblet. Lb., 20c, postpaid, 30c.

## KALE

### Emerald Isle.

#### Finest Kale in the World.

This is really the handsomest Kale that has ever come under our notice; and is entirely distinct from other strains, very hardy, of medium height, and very vigorous, throwing out new shoots as fast as the leaves are used, and will furnish excellent greens all winter. The closely curled, handsome leaves are most attractive and of fine flavor. A fine exhibition plant.

Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 30c.

### Tall Green Curled Scotch.

Grows about two feet high; leaves dark green, curled and wrinkled; very hardy and is improved by a slight frost.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c.

**HALF DWARF MOSS CURLED.** Medium sized leaves, nicely curled.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb. 30c.

**DWARF GREEN CURLED.** Leaves beautifully curled and bright green.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c.

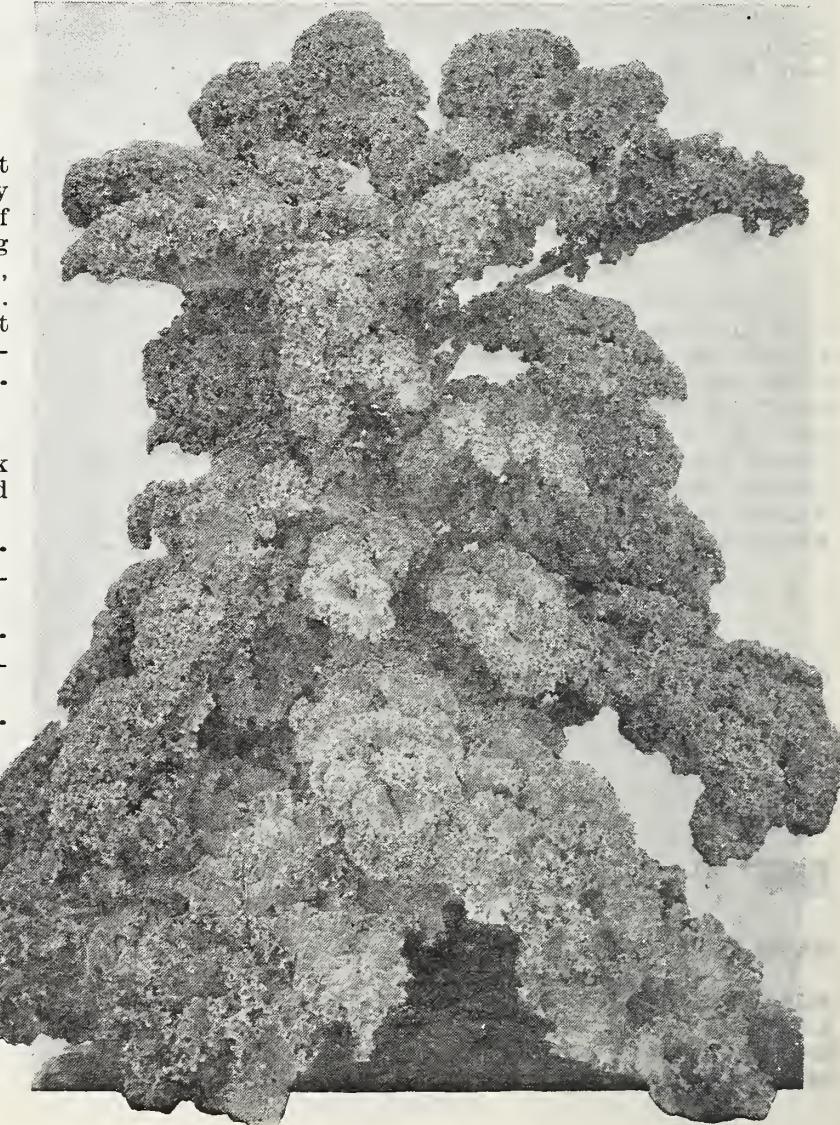
## LEEK

The Leek belongs to the Onion family. Prized for soups. Cultivation similar to that of Onions, but should be hilled up about the neck to blanch it.

### Large Rouen, or American Flag.

A large, favorite American sort.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.25



## Kohl Rabi

Hardy and of easy culture. Grown from plants the same as cabbage. The Kohl Rabi is a vegetable intermediate between the cabbage and turnip and combines the flavor of both. The edible part is a turnip-shaped bulb formed by the swelling of the stem. Kohl Rabi is far superior to cabbage or turnips in the delicacy of its flavor, and is a splendid addition to every garden. It should be eaten before growth ceases.

### Early White Vienna.

Very early; bulb white; best table variety.

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

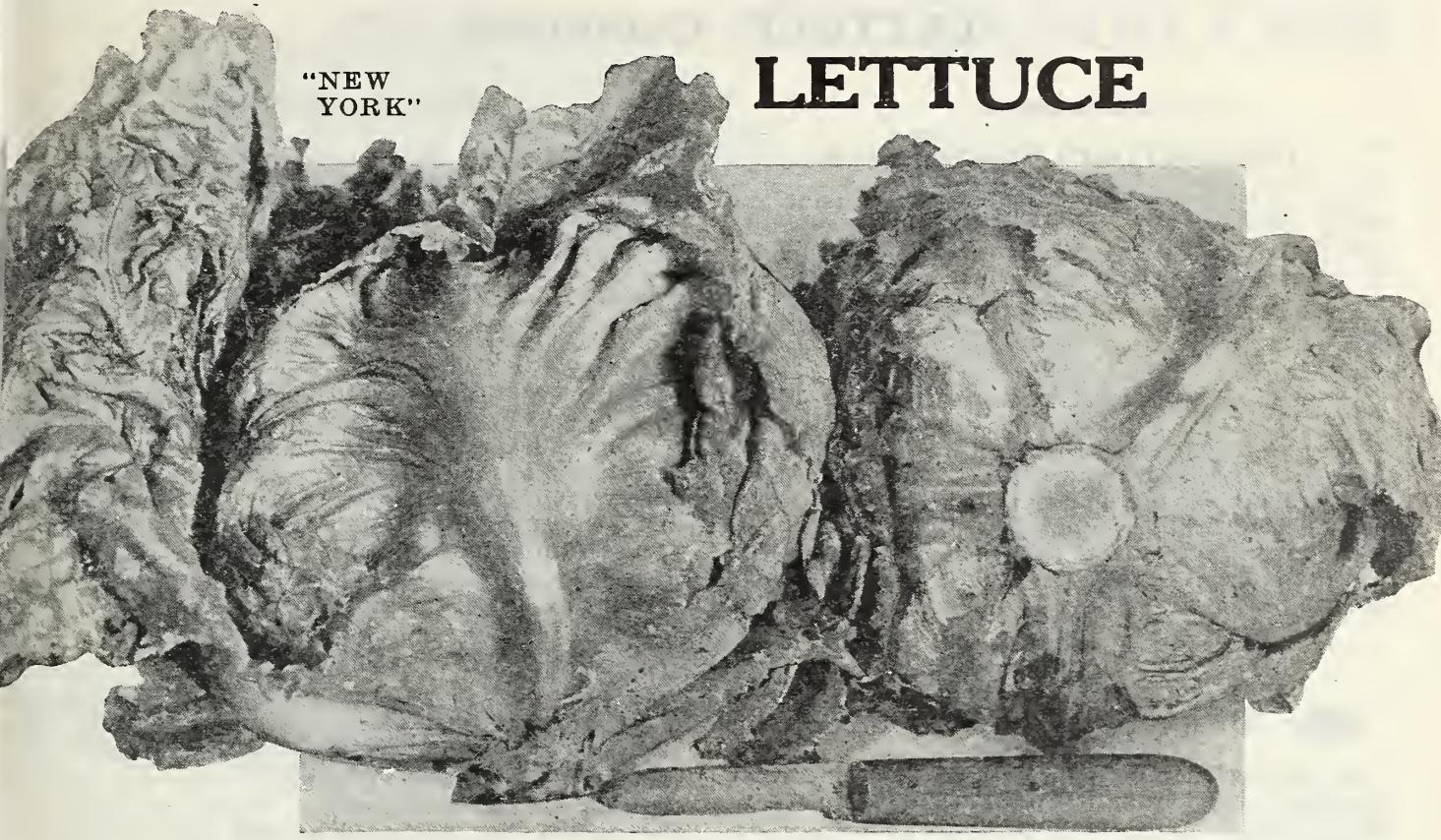
### Early Purple Vienna

Same as above, except in color, which is purple.

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

## Horse Radish Roots

For prices and description, see Plant Department.


 "NEW  
YORK"

# LETTUCE

**LETTUCE** is so extensively grown that cultural directions seem unnecessary, but we offer a few simple suggestions that may save a later disappointment, as any failure is generally blamed to the seed. This should not be, as Lettuce, like many other vegetables, requires very rich soil, plenty of water, a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the Spring, and the weather turns dry and hot, they will run up to seed without heading. The same seed sown in the Fall or with cooler growing weather would develop perfectly. At a temperature of 40 degrees or lower lettuce will not thrive. At 65 degrees and upward it has a tendency to run up and not head properly. For outside planting sow the seed in shallow drills from one to two ounces to the 100 yards. An ounce will produce 3,000 plants. Four pounds should plant an acre. Lettuce matures in forty to sixty days from time of planting.

### New York or Wonderful

This is the mammoth head lettuce so popular in California from whence it is shipped to the Northern markets, arriving in splendid condition. The immense heads are solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. The quality is unsurpassed, being tender, crisp and sweet. New York is a hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

### All Seasons.

A valuable new "Butter Head" Lettuce; the best main crop variety, as its large heads continue to grow for two or three weeks after they are ready to use, and are very slow to seed.

"All Seasons" is headed up ready for use in less than ten weeks from planting. Color of outer leaves is a bright green, with inner leaves blanched a rich golden yellow: very crisp and of excellent flavor. **Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00.**

### Salamander

#### For Hot Dry Sections.

A fine medium early lettuce of good size, forms compact heads, crisp, tender and of a fine buttery flavor. Creamy white head with outer color light green; stands drouth well and is slow to seed.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.25.**

### Large Drumhead.

One of the largest heading kinds, but the heads are not so solid as the Hanson or Deacon.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.**

### Portland Seed Company's New Crispette.



Our "New Crispette" is a beautiful lettuce, the quality of which is simply perfect. The large, curly leaves, which cover the outside of the solid heads, are of a bright, light green. The unusual solidity of the heads is insured by the large, white main ribs of the leaves, each of which curving strongly toward the center, makes it impossible for the leaves to open outward and expose the center, which will always be found crisp, tender, sweet and melting. It matters not whether grown to head in the early Spring or the hottest days of Summer, the leaves are always **crisp and tender**.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.**

### May King.

A large growing, smooth leaved, richly flavored sort. Plant, light green, with round leaves, which form into a very solid, compact, round head; stands a long time without running to seed. Inner leaves blanch to a rich, golden yellow. **Exceedingly rich, tender and buttery.** Fine for open ground or forcing. For succession plant in Spring, then in August and again in September.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c.**

### Grand Rapids—For Early Forcing.

As a Lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list. Of quick growth, and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, light yellowish green leaves, slightly crimped and blistered, rather thin, good flavor, crisp and tender. It will stand shipping better than most curled sorts.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.25**



## LETTUCE—Continued

### Hanson.

#### Improved Hard Heading Stock.

One of the very best. Heads green outside and white inside; grow to a remarkable size, very solid, and is deliciously sweet, crisp and tender. It withstands the hot sun well.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.25.

### California Cream Butter

A fine large butter head lettuce of the richest flavor, tender, sweet and crisp; a great favorite in California, being a popular market variety, medium early. The heads are very broad, often measuring eight inches across and continue to grow for two or three weeks after they are ready to use, and are very slow to seed.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.25.



### Simpson's Early Curled.

A leading market variety used for very early planting and forcing. Forms a dense mass of finely curled and wrinkled leaves that are excellent and tender, and do not wilt readily.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

### Black Seeded Simpson.

Forms a close, compact mass of curly leaves of a yellowish green.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

### Brown Dutch.

Forms a large, solid head, sweet, tender and of good flavor. Outer leaves are tinged with brown. Very hardy.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.25.

### Deacon.

Heads very solid and of excellent flavor, remains in condition for use as long as any variety in cultivation. Plant medium sized, with very few outer leaves, which are deep green and very thick, while the inner ones blanch to a bright yellow and are exceedingly well flavored, crisp and tender. This is certainly one of the best varieties for Summer use.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

### Early Prize Head.

Standard sort; one of the best thin leaved, clustering varieties. The very large leaves are savoyed or crimped, bright green, tinged with red, and are exceedingly tender, crisp and sweet, forming a large, loose head. One of the best for the garden, but not good to ship long distances.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

### Early Tennis Ball.

The plant is small, of rapid growth, and should be used as soon as large enough, as it quickly runs to seed. Leaves dark green, thick and crisp. One of the best for growing under cover, and for forcing. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

## MUSTARD

**Mustard** is used alone as "greens," or with cress as salad. Sow any time in the Spring, in rows, and thin out as necessary.

### Fordhook Curled

Beautiful dark green, finely curled plume-like leaves that are of distinctive flavor; superior to spinach as greens and is fine for salads. Fordhook Curled is vigorous and productive.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., 90c.

**SOUTHERN GIANT CURLED.** We offer a fine strain of the true curled leaf.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 50c.

**WHITE ENGLISH.** Leaves mild, tender when young; seeds yellow. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 40c.

### Chinese Mustard

Less pungent than other varieties, Chinese Mustard is most delicious, thriving at the same season and under conditions that are favorable to spinach. A splendid addition to our gardens.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 40c.



### Mushroom Spawn

With intelligent care and good spawn, Mushrooms can be made to pay handsomely. They can be successfully grown in a dry cellar, under the benches of a greenhouse, or in sheds, where the temperature can be kept from 50 to 60 degrees through the Winter. Our free pamphlet gives general instruction.

### Lambert's Pure Culture.

A new kind of spawn, without a doubt the best; much superior to the common English. It comes in bricks, weighing about 20 ounces. These are broken up into pieces the size of a walnut and put into the bed one foot apart each way. Price, per brick, 25c; postpaid, 40c; by express, not prepaid, 5 bricks, \$1.00.

**MUSHROOMS. How to Grow Them.** By Falconer. 162 pages. Postpaid, \$1.10  
**MUSHROOM CULTURE and Pure Culture Spawn.** 32 pages. 35c. Postpaid



# MUSKMELONS

## Culture.

PLANT IN HILLS four to six feet apart each way, after danger of frost is past and ground is warm; enrich well with well-rotted manure and plant the seeds just under the surface, not too deep. One ounce to fifty hills; two to three pounds per acre.

Melons thrive best on warm, light soils, but good crops are obtained on heavy ground if it is rich and well drained; in cultivating, hill up by drawing the soil toward the plant. Use Bug Death, lime, slug shot or land plaster for destroying insects.

## Burrell's Rustless Rocky Ford Cantaloupe

### See Cut

This new melon, the highest development of the Rocky Ford type has light green flesh which is very deep, rich and delicious, the quality being unsurpassed. It is solidly netted, thrifty, vigorous, rust resistant and a continuous bearer until frost. Ninety-five per cent of the seed crop were choice, standard size melons.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.

## Emerald Gem.

The superior quality of Emerald Gem makes it most desirable for home gardens. The flesh is very thick, of a dainty salmon color, and the flavor is the finest and sweetest of all melons. The skin is smooth and of a deep emerald green; rind thin; it bears early and is very prolific.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00.

## Small Green Nutmeg.

A variety ripening early. Flesh, green, fine and sweet. Superior for the early market, or family garden, and a favorite for hotels and restaurants.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

## Osage, or Miller's Cream.

One of the finest flavored melons in cultivation, and highly recommended. The flesh is of a rich salmon color, very sweet and melting in quality.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

## Paul Rose, or Petoskey.

Created by a cross between the Netted Gem and Osage; fruit oval, about five inches in diameter, rich orange in color, sweet and highly flavored.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00.

## Well-Known and Popular Varieties.

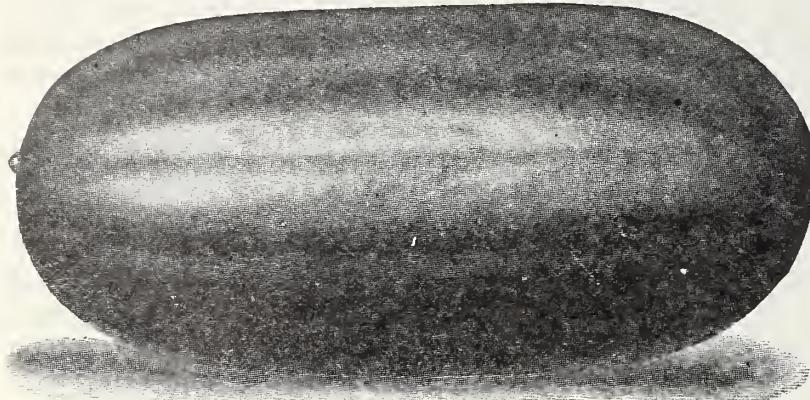
	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>JENNY LIND.</b> Extra early, flesh green, fine flavor.....	5c	10c	25c	75c
<b>EXTRA EARLY HACKENSACK.</b> Flesh green, delicious, juicy and sweet; medium size.....	5c	10c	25c	75c
<b>LARGE YELLOW CANTALOUP.</b> Early and productive; flesh salmon color, rich, sweet.....	5c	15c	35c	\$1.00

"DIAMOND" FERTILIZERS are an investment, not an expense, and will repay many times their cost.—Ask for Free Booklet.



# WATERMELONS

**CULTURE.**— Watermelons thrive best on light, well drained soils, but give good results on any good rich garden soil that is properly drained and cultivated. Plant after the weather is settled and ground warm. Hills should be eight feet apart each way and with well rotted manure thoroughly worked into each hill. One ounce of seed will plant thirty hills; two to three pounds per acre. Thin to two or three plants per hill.



**Tom Watson**

This excellent new melon is of elongated form, averaging 18 to 24 inches in length, 10 to 12 inches in diameter, has a thin dark green rind and deep red flesh; crisp and sugary, with a lusciousness and distinctive flavor that makes it one of the finest melons ever produced; is hardy, early and stands handling and long shipment. We consider it a valuable market or home variety.

**Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.**

### Halbert Honey Watermelon

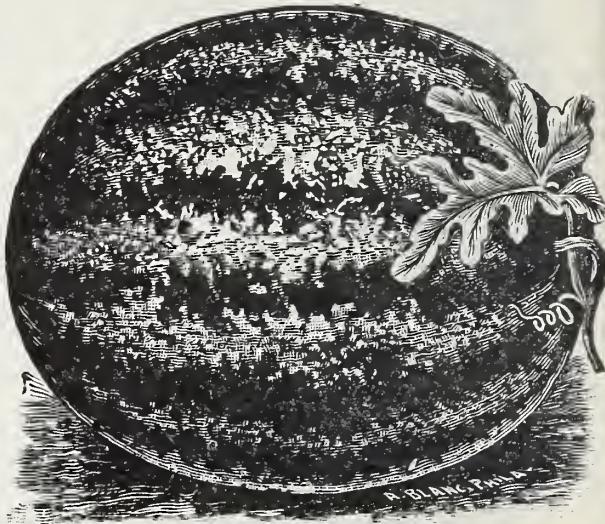
This superb Melon is a great improvement over the well-known Kleckley Sweets, as it fully equals it in delicious flavor and crispness, is more uniform in outline, darker in color, more vigorous and productive, and will ripen melons perfectly in the cooler sections where other varieties fail. The average length is eighteen to twenty inches, both ends being blunt and fully rounded out. The rich, dark glossy green, the thin rind and the bright crimson center make the new Halbert Honey the most attractive Watermelon.

**Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.**

### Kleckley's Sweet, or Monte Cristo.

A splendid sort for home use or near markets. Vine vigorous and productive; fruit of medium size; oval; color dark, mottled green in two shades, forming indistinct stripes. Flesh a beautiful bright rich red; exceedingly sweet and tender.

**Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 65c.**



**Sweet Heart.**

This melon has become very popular as a shipping melon. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and very light green; rind thin, but firm; flesh bright red, firm, solid, but very tender, melting and sweet. Fruit retains its good quality for a long time after ripening.

**Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 60c.**

### Cuban Queen.

A very fine variety, growing to a great size: flesh bright red, solid and sweet. The skin is beautifully striped dark and light green. Melons are wonderfully solid; rind thin. They are enormously productive and ripen early.

**Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 60c.**

### Ice Cream, or Peerless.

A grand favorite and standard variety. Superior in every respect. Has beautiful crimson core, which is always fine grained; can not be surpassed in flavor: very prolific.

**Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 60c.**

### Fordhook Early.

A fine extra early melon. Fruit of good size; skin dark green; flesh bright and crisp, sweet and good quality; rind thin, but tough. Good shipper.

**Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 60c.**

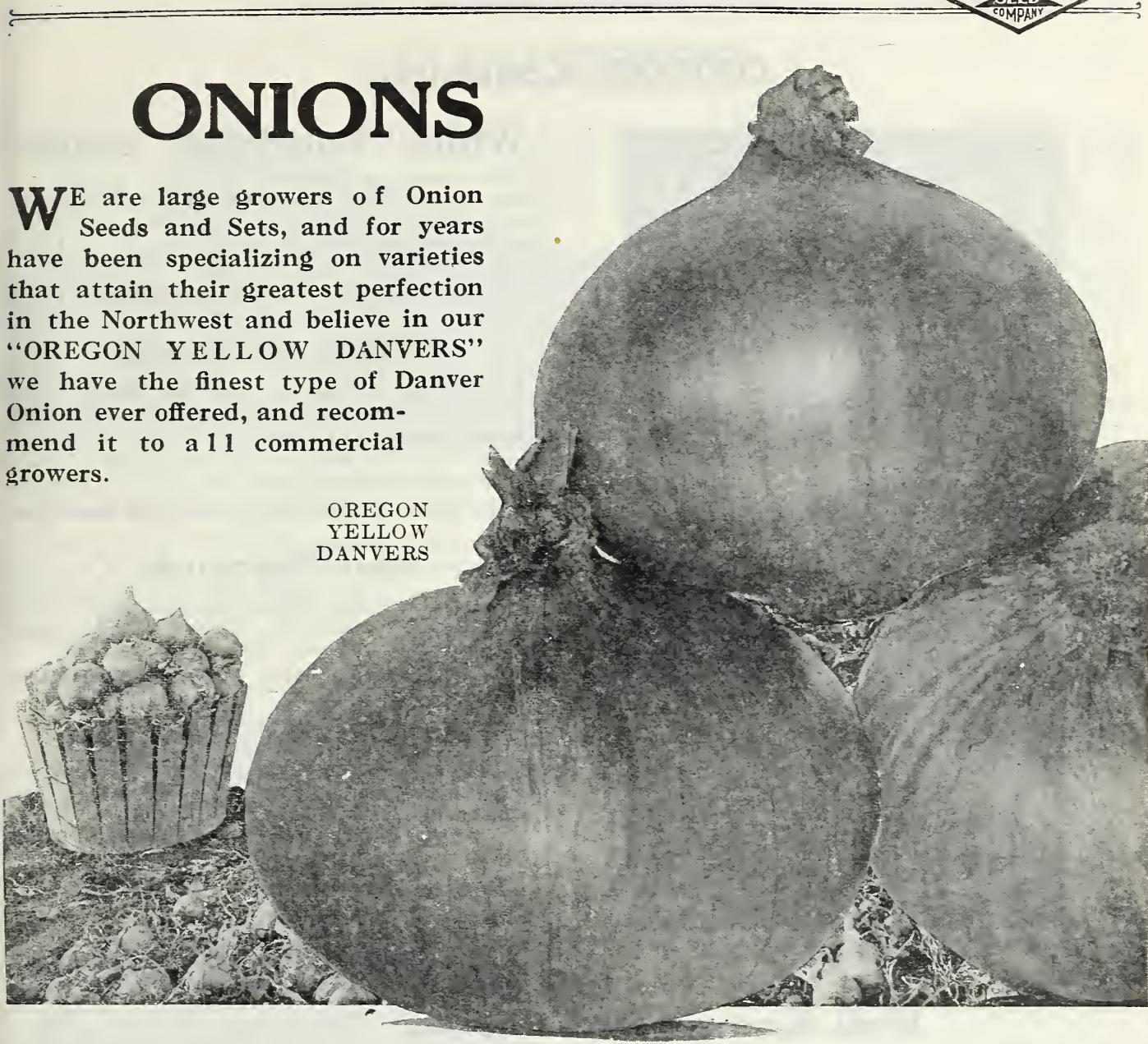
## Well-Known and Standard Varieties

	Pkt.	Oz.	1/4 lb.	Lb.
<b>DARK ICING.</b> Early, round, solid, with thin dark green skin; of superb quality.	5c	10c	25c	60c
<b>FLORIDA FAVORITE.</b> Large and long; rind firm; flesh deep red.....	5c	10c	20c	60c
<b>PHINNEY'S EARLY.</b> Early, hardy; flesh pink; very sweet, tender and crisp ...	5c	10c	20c	60c
<b>CITRON.</b> (Red or Green Seeded). Round and handsome; for preserving only ...	5c	10c	25c	75c

# ONIONS

WE are large growers of Onion Seeds and Sets, and for years have been specializing on varieties that attain their greatest perfection in the Northwest and believe in our "OREGON YELLOW DANVERS" we have the finest type of Danver Onion ever offered, and recommend it to all commercial growers.

OREGON  
YELLOW  
DANVERS



**CULTURE.**— The Onion thrives best in a rather **deep, rich, loamy soil**, and unlike most vegetables succeeds well when cultivated on the same ground for successive years. The best culture requires that the ground should be deeply dug and heavily manured with well rotted manure a season or two previously.

## Portland Seed Co.'s Oregon Yellow Danvers

This is the variety generally planted in the Northwest. The largest crops of onions and the best keepers, bringing the highest prices on the Pacific Coast markets are the **Oregon Yellow Danvers**. The bulbs are uniformly large, of a half-globe in shape, with small necks, and as a market or table onion can not be excelled.

Our seed is grown specially for us by the best onion seed growers in Oregon. No onion grower can afford to plant anything inferior when such seed can be obtained. **Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.** Sow as soon as ground can be prepared in the Spring. Give clean culture. An ounce of seed should drill 150 feet—3 to 4 lbs. per acre. *If you contemplate a large planting, write us.*

## Ailsa Craig

**AILS A CRAIG** is large, globe shape, straw colored, having no rival in form, size or weight. The quality is superb, being mild, crisp and delicious. The attractive appearance, delicate flavor and large size always make Ailsa Craig in great demand. For best results it should be started inside early and transplanted. This treatment gives wonderful results in size and yield; 800 to 1000 bushels per acre can be grown in this way.

**Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c**

## Australian Brown

This onion resembles the Oregon Yellow Danvers in general appearance, but has a clear, amber-brown skin that attracts buyers. It matures early, ripens uniformly, and will keep in good condition longer than any other onion. **We offer the true seed, Oregon grown.**

**Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.**

## Yellow Globe Danvers

A very handsome, round or globe-shaped variety of large size, with thin, yellowish skin, white flesh, fine grained, mild, very firm, and the best of keepers. It ripens early

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.35.**

## Large Red Wethersfield

A standard variety: one of the most productive kinds, even in poor soil. Its good keeping qualities render it one of the best for shipping.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**

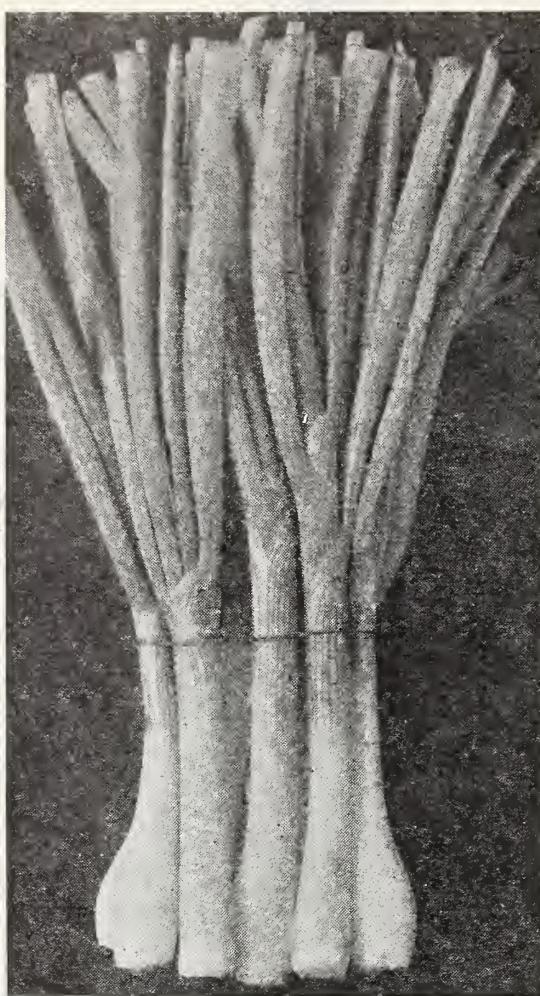
## Prizetaker—The Genuine The Handsomest and Largest Yellow Globe Onion.

Of fine flavor, handsome shape and enormous size. A perfect globe shape, with a bright straw-colored skin; the necks are very small and the onions always ripen up hard.

**Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.**



## ONIONS—Continued



WHITE BUNCHING

## White "Bunching" Onion

This variety is especially useful to market gardeners for producing an attractive "green onion." The young stalks blanch to a beautiful clear white and are crisp and mild, attaining a good size before the bulb forms.

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; per lb., \$1.50.

## White Bermuda

A beautiful market variety for fancy trade; color a delicate pinkish straw; flavor very mild.

**White Bermuda** matures in less than six months from the time of sowing, and we believe it to be a valuable early onion for our Coast growers. Try it. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.00.

## Red Bermuda

Identical with the White except in color, which is a pale, translucent red. This is the ideal early onion wherever the red variety is preferred.

Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.00.

## Extra Early Red Flat

A medium-sized, flat variety; comes into use nearly two weeks earlier than the Large Red Wethersfield.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.

## White Portugal or Silver Skin

Skin and flesh pure white; mild flavor and flat shape; grown largely for sets.

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.

## Well-Known and Popular Onions

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>YELLOW FLAT DANVERS.</b> Largely planted. Flesh fine grained; mild; white; good keeper.	5c	15c	35c	\$1.25
<b>EXTRA EARLY BARLETTA.</b> A small, pure white, mild onion; fine for pickles	5c	20c	50c	1.50
<b>WHITE GLOBE.</b> Flesh very white, fine, rich and sweet; fine keeper	5c	20c	50c	1.75
<b>GIANT ROCCA.</b> Large, globe-shaped; skin reddish-brown; flesh mild, sweet flavored	5c	20c	50c	1.75
<b>MAMMOTH SILVER KING.</b> Very large and attractive; skin white; flesh fine grained and mild.	5c	20c	50c	1.75
<b>QUEEN.</b> If sown thickly, produces small, very firm bulbs, the best of all for pickling; if given more room, matures an excellent onion, that will keep all Winter	5c	20c	50c	1.50

## Onion Sets—Pound Prices Postpaid

## Bottom Onion Sets.

Small onions grown from seed that has been sown too thickly to attain a large size. The small onions (about  $\frac{1}{2}$  inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table or bunched for the market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown directly from the seed.

Per lb., 25c.

For Garlic see page 20.

## Top Sets.

Produced in clusters.

Per lb., 25c.

## Shallots.

Valuable for bunching or for an early crop. The smallest sets make fine bulbs of good size, while the larger ones produce a cluster of small to medium-sized bulbs. Light brown skin; mild, white flesh.

Per lb., 30c.

## Bottom Multiplier

Potato onion sets.

Per lb., 30c.

## Okra or Gumbo

## White Velvet.

The pods are smooth or very slightly ribbed; large; remain tender a long time.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 60c.

## Improved Dwarf Green.

Very early, with long, green, slender pods.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 60c.

## PARSNIPS

A "Planet Jr."  
Makes  
Gardening  
Easy.

THE Parsnip is nutritious and wholesome, with a sugary sweetness peculiar to itself, and is desirable both for the table and stock feeding. It yields a large crop, and is said to be more valuable for dairy cows than either the carrot or turnip. As the seed germinates very slowly, sow as early in Spring as possible, in drills fifteen inches apart on deeply cultivated, rich, loamy soil. Keep clear of weeds and thin to three or four inches apart. The roots of the parsnip are improved by freezing.

### Early Round

Medium sized, top shaped, easily dug, has a fine rich flavor—good for home gardens.

Pkt. 5c; oz., 10c; 1/4 lb., 20c; lb., 50c

### Guernsey. Half Long

Root white, very tender, with a smooth, clear skin. Shorter and thicker than "Hollow Crown" desirable for stiff soils.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 50c.

## Parsley

Very useful for flavoring soups, meats and for garnishing. The green leaves are used for flavoring or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

### Fine Triple-Curled, or Myatt's Garnishing.

A fine, free growing, but not large variety. The plants bear a great number of leaves, which are so abundant and so finely curled that they resemble a bunch of moss.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

### Turnip-Rooted, or Hamburg.

The root, which resembles a small turnip, is the edible portion of this variety. Extensively grown and used for flavoring soups, etc.

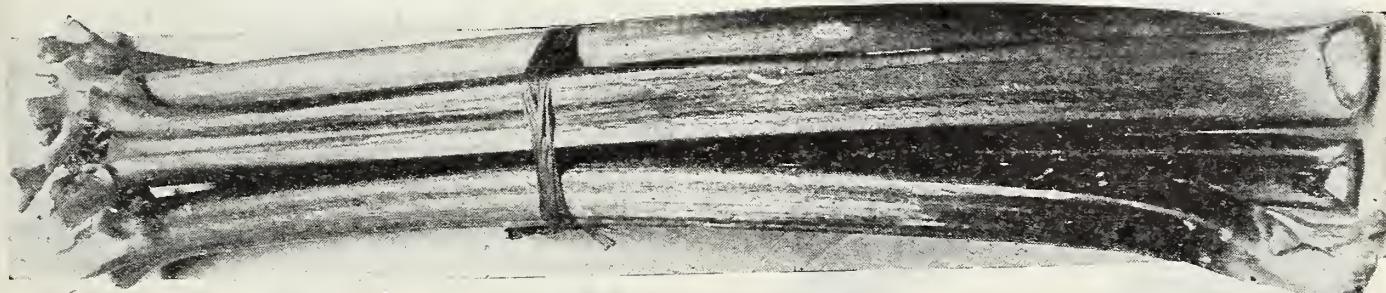
Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

### Champion Moss Curled.

A compact growing, finely cut and much curled variety of a bright green color.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

## Rhubarb or Pie Plant



**CULTURE.**—Rhubarb succeeds best in deep, rich, somewhat retentive soil. The richer its condition and the deeper it is stirred the better. Sow in drills an inch deep and thin out the plants to six inches apart. In the Fall transplant the young plants into very highly manured and deeply stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure each Spring. The stalks should not be plucked until the second year and the plant never allowed to exhaust itself by running to seed.

### Victoria, or Mammoth

Very large; finest cooking variety.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

### Giant Linnaeus

A large early variety, very tender and of fine flavor.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

 **Rhubarb Roots.**—From October to June we can always supply one or two-year old Rhubarb Roots. Customers wanting only a few dozen roots for home gardens will save much valuable time by ordering roots instead of seed. For prices, see Plant Department.



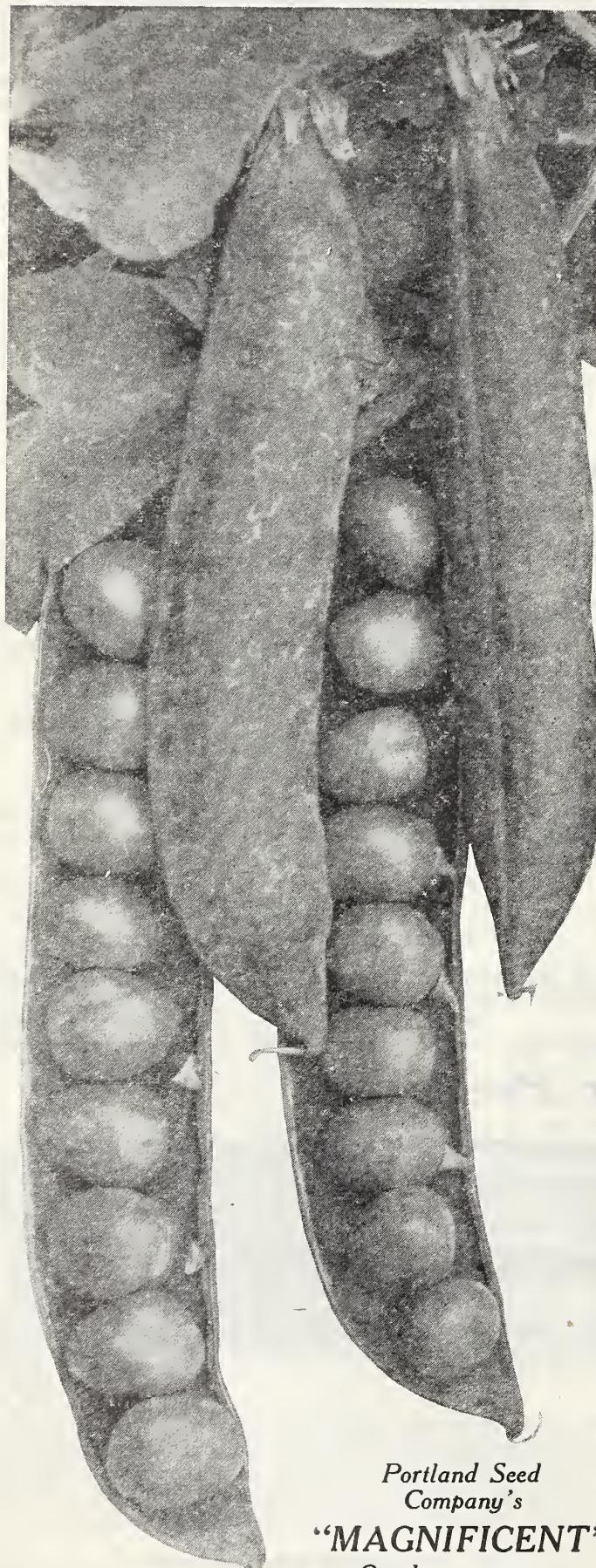
**'Diamond Quality'**

# GARDEN PEAS

**Selected, Hand Picked**



**Add 10c. per lb. postage for Peas by mail—except 10c. pkts., which are postpaid**



*Portland Seed Company's  
"MAGNIFICENT"  
Our best main crop  
garden Pea.*

**G**ARDEN Peas are one of the most important crops and we have spared no effort to select and improve the best strains of the most profitable and satisfactory varieties. These selected strains, grown under our direct supervision for many years, will give you the biggest yield and the handsomest, sweetest, best flavored Peas for early market or home garden. The varieties offered have proved by growing tests to be the best of their kind and class.

## Extra Early Peas

### New—Richard Seddon

A dwarf English Pea of the finest quality; very early. Has large shapely pods well filled. Is sweet and delicious. A hardy, prolific Pea of the greatest merit. As early as American Wonder and far more prolific. Try it.

**Pkt., 10c; lb., 25c; 10 lbs., \$2.00.**

### Blue Bantam

Extremely early, "Blue Bantam" excels in the size of pods and quality of the sweet large dark green Peas with which they are filled, and is said to surpass all extra early dwarf varieties in yield. Very dwarf and hardy.

**Pkt., 10c; lb., 25c; 10 lbs., \$2.00.**

### Unique

#### Our New Extra Early Dwarf Pea

Quality and sweetness unsurpassed; yields enormously; has largest and longest pods of any Extra Early Dwarf Pea, and they are filled clear to the ends with rich, fine flavored Peas, as sweet as sugar.

Vines are only eight to ten inches high, and peas are ready for table in sixty days from date of planting. Mature evenly, and are all gone in less than ten days—a very valuable point for market gardeners.

**Pkts. only 10c.**

### Little Marvel

#### A Splendid New Dwarf Pea for Home or Market

The dwarf, bushy vines averaging 15 inches are loaded with firm, square-ended pods 2½ to 3 inches long, tightly filled with plump, luscious, deep green peas. Little Marvel is as early as American Wonder, fully equals the superb quality of Nott's Excelsior and far outyields these two popular sorts. **Pkt. 10c; lb., 20c; 10 lbs., \$1.75.**

### Alaska or Earliest of All The Standard Extra Early Variety

A smooth, blue pea, of even, vigorous, growth and extra early maturity. Vines two to three feet high, unbranched, bearing four to seven long pods, which are filled with medium-sized, bright green peas of excellent flavor. A great favorite with our market gardeners for Fall or early Spring planting. **Pkt., 10c; lb., 15c; 10 lbs., \$1.25.**

## PEAS—Continued

## Early Garden Peas—Standard Varieties



Add 10c per lb. postage for peas by mail—except 10c pkts., which are postpaid

## Portland Seed Co.'s Magnificent

We like "Magnificent" better every year. It is just what the name implies, a magnificent pea. A robust grower, producing in **astounding profusion** large, handsome, deep green pods, closely packed with luscious, tender, sweet peas. A grand medium early pea for home and market garden; bears through a long season. Height, two feet. You will not be disappointed in this new variety.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

## Laxtonian

A new, early, dwarf, robust, large podded pea of superior excellence; often referred to as "Dwarf Gradus," and is said to surpass Gradus in yield and quality, with the added advantage of dwarfer growth, averaging 16 inches. The large pods are well filled, holding 8 to 10 peas.

Laxtonian is so highly recommended that you should give it a trial.

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

## American Wonder

One of the most popular and best of the early wrinkled sorts. A great favorite for family use. Has stout, branching vines, covered with well-filled pods containing seven or eight large, exceedingly sweet, tender and well-flavored peas. Height 10 to 12 inches.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

## Gradus

This extra early, wrinkled pea bears pods of large size and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth, vigorous and healthy; vines 2 1/2 feet in height; very prolific. The quality and flavor are delicious and the peas remain tender and sweet for a long time.

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

## Nott's Excelsior

The most desirable sort for the market gardener, and unexcelled for the home garden. Very hardy. The pods contain from six to nine large peas, which are unusually fine flavored and tender.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

## Veitches Perfection

Highly esteemed for its splendid quality and great productiveness. Pods are long and well filled with large, fine-flavored Peas. A standard medium or late market and canning variety desirable on account of its extraordinary yield.

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

## William Hurst

A splendid English variety of special merit, grows to a height of 18 inches is very early and bears its shapely, well filled pods in great abundance. A vigorous grower and one of the very best Garden Peas for home or market use.

Pkt., 10c; lb., 15c; 10 lbs., \$1.00.

## Premium Gem

One of the earliest dwarf varieties, coming in a little later than the American Wonder; grows taller, much more productive and continues in bearing longer. The quality of the pea is very superior. Height, 15 inches. Pkt., 10c; lb. 15c; 10 lbs., \$1.15.

## Main Crop Varieties

## Improved Dwarf Telephone

## Our Own Select Strain.

Dwarf Telephone is the famous old Telephone without its long vines; of healthy, stocky growth; very productive; pods large, broad, straight and remarkably well filled with large, sweet peas of delicious flavor; very desirable. Eighteen to twenty inches high.

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

## Improved Stratagem

One of the best of the large podded peas; the pods are of immense size filled with large, dark green, wrinkled peas of the finest quality; vine of medium height, but very stocky, with very broad, light green leaves, and bearing an abundance of large, handsome pods.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

## Telephone—Tall

## A Great Favorite With Our Market Gardeners.

Immensely productive, of the finest quality and excellent, sugary flavor; vines strong; the pods are of large size, filled with large, luscious peas; height four feet.

Pkt., 10c; lb., 20c; 10 lbs., \$1.25.

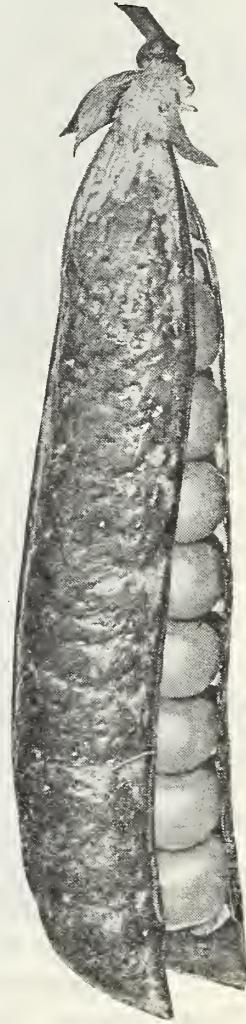
## Yorkshire Hero

One of the largest, sweet, wrinkled kinds; vines strong and spreading; pods of good size and well filled; much in use, and has enjoyed a long popularity; medium late; bears a long time; height, 2 1/2 feet.

Pkt., 10c; lb., 15c; 10 lbs., \$1.15.

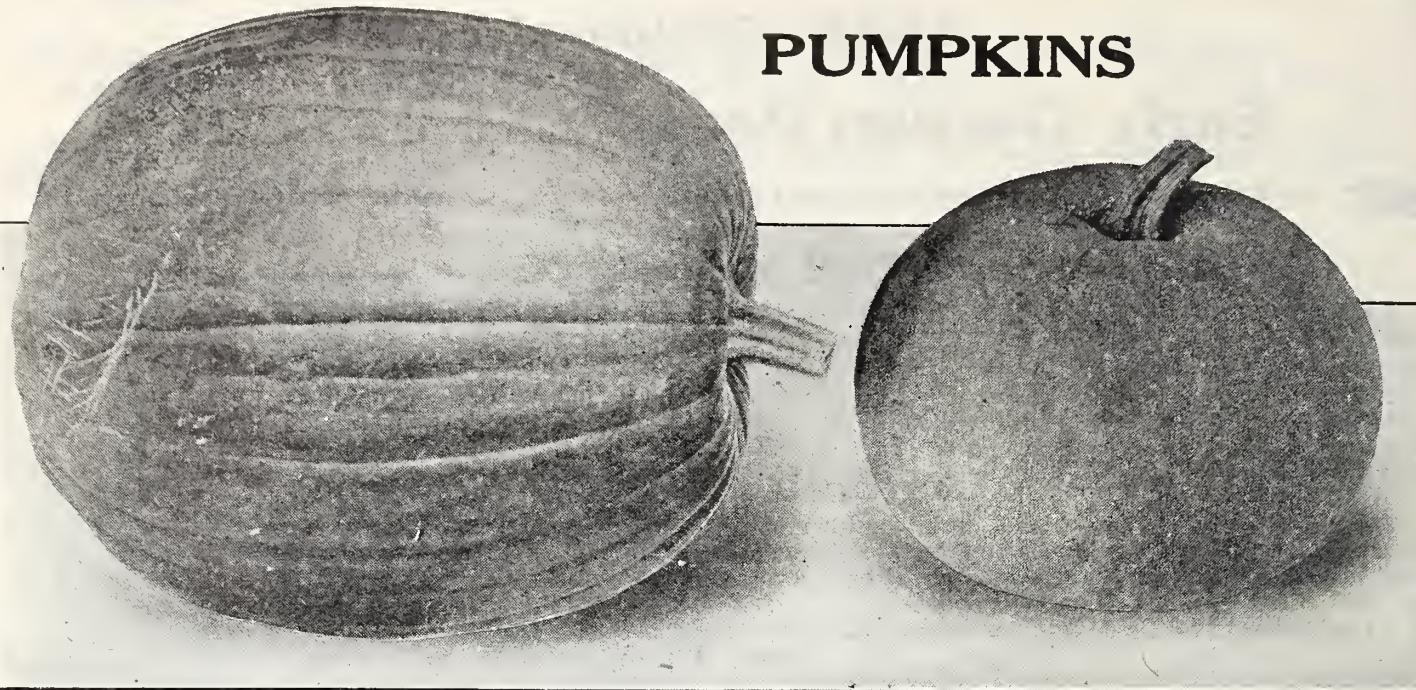
## USE FARMOGERM

ON GARDEN PEAS --- Insures the maximum yield and improves the soil. SEE PAGE 47.





## PUMPKINS



**CULTURE.**— Pumpkins will grow on any good farm land, but their size and quality will depend on the culture and fertility of the soil. Plant early in May, in hills six to eight feet apart. One pound of seed will plant about 300 hills. Care should be taken to keep the different varieties well apart, also away from other vining plants, as they mix and deteriorate very rapidly.

### Winter Luxury.

The best flavored pie pumpkin grown; enormously productive; excellent keeper; medium size; color, golden-russet, finely netted; flesh, deep golden, sweet, tender and very thick; none better.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Sweet, or Sugar.

A handsome and productive small pumpkin, ten to twelve inches in diameter; round flattened; skin, orange; flesh, deep yellow, fine grained and very sweet. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Tennessee Sweet Potato.

Pear shaped; flesh thick, cream white, fine grained and of excellent flavor.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Large Yellow, or Connecticut Field.

Large, round; deep, glossy yellow. Vines vigorous and very productive; good keeper. Grown extensively for stock feeding.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

### Giant of All

#### "King of Mammoths."

This colossal Pumpkin is almost a globe in shape. The skin is of a beautiful, rich golden yellow; flesh firm, fine grained and deep yellow, sweet flavored, very thick and of excellent quality for so mammoth a variety. These Pumpkins attain an enormous size and will carry away prizes at your county fairs.

Large pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.50.

### Mammoth Tours.

A productive French variety; grows to an enormous size. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Large Sweet Cheese

A popular variety. Fruit flattened; skin mottled light green and yellow. Flesh, yellow, thick, tender; very nutritious and of excellent quality; a most productive variety.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

## PEPPER

Sow the seeds early in hotbeds; or later, when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield.

**NEW NOCERA.**— A Giant Red Pepper of largest size; mild and very fleshy; a favorite English variety.

Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.00.

**NEW CHINESE GIANT SWEET.**— The largest and best of the mild Red Peppers. The fruits are four to five inches in diameter, borne in clusters on the thick, stocky bushes, that are well branched, and grow about two feet high; color, brilliant, deep red; vigorous and about as early as Ruby King.

Pkt., 10c;  $\frac{1}{2}$  oz., 25c; oz., 40c;  $\frac{1}{4}$  lb., \$1.25.

Pkt. Oz.  $\frac{1}{4}$  lb.

<b>RUBY KING.</b>	Very large, sweet and mild; bright scarlet.....	5c	25c	75c
<b>LARGE BELL, or BULL NOSE.</b>	Large, mild, thick fleshed variety. One of the best for stuffed pickles.....	5c	25c	75c
<b>GOLDEN DAWN.</b>	Bright, golden yellow; very productive; entirely free from fiery flavor.....	5c	25c	75c
<b>SWEET SPANISH, or MOUNTAIN.</b>	Of the largest size, bright scarlet. Excellent for pickling and stuffing.....	5c	25c	75c
<b>CAYENNE.</b>	Pods long; bright red; very pungent and used very largely with pickles when green.....	5c	25c	75c
<b>CHILI.</b>	Pods small and pointed; brilliant scarlet; very pungent when ripe. ....	5c	25c	75c



# RADISHES

To secure Radishes with crisp, tender flesh, grow them quickly in rich, loose soil, and gather before reaching full size. Our Radish Seed is strictly of the finest grade, being grown from carefully selected roots. Frequent planting should be made for succession, so that a supply of fresh, tender Radishes in the finest condition may be had at all times.

## White Icicle

This superb Radish is the finest and longest of the very early, pure white varieties. Planted in the Spring, is ready for use in twenty to twenty-five days; their long, slender form and pure, paper-white skin are most attractive when bunched for market. This Radish is not only crisp and tender when young, but also retains these qualities until the roots attain large size; is excellently adapted for forcing purposes or successive sowing in the open ground and gives a continuous supply of tender, crisp Radishes for the table or market throughout the season.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## Early Crimson Giant.

### The Largest Early Scarlet Turnip-Shaped Radish.

A new, early Radish, double the size of any of the turnip-shaped type, but, notwithstanding its immense size, does not get hollow and pithy. The flesh is a sparkling white, solid, crisp, juicy and of the mildest flavor. The shape of the bulb varies from round to almost oval, but the bright, deep crimson color of the skin remains quite constant. Excellent for both forcing and open ground.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00

## Early Scarlet Turnip

A small, round, red turnip-shaped Radish, with small top and of very quick growth; very early; rich color and crisp, tender flesh.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c;

## Cincinnati Market

A superior strain of long scarlet, an early, rapid grower of a deep crimson color so clear and brittle as to be almost transparent. Keeps fresh and stands shipment — a fine market radish.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## French Breakfast, or Half Long.

Medium size, quick growth, crisp and tender; lower end and taproot white.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## Early Scarlet Turnip, White Tipped

A beautiful variety; deep scarlet with white tip. Very early. Has a small top, and may be planted closely. Flesh crisp, tender and sweet. Cannot fail to give satisfaction as a forcing Radish.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## Early Long Scarlet, Short Top.

This bright scarlet, small topped sort is uniformly straight, smooth, brittle and crisp, and is a standard and excellent sort for private gardens or market use.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

## Long Brightest Scarlet, White Tipped

This is the brightest and handsomest colored Scarlet Radish known. The lower third of the root is snow white; very attractive. It is extra early and the flesh is very tender. Valuable for forcing or open ground.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## Improved Chartier.

Roots long, tapering, and attaining a very large size. Of rapid growth; remains crisp and tender till fully grown. Color, scarlet above, shading into white at the tip. Flesh white and mild flavored.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## Lady Finger, or White Vienna

Of rapid growth and beautiful shape. Skin and flesh snow-white; very juicy, firm, crisp and tender; the finest of Long White Radishes.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.



CRIMSON  
GIANT

## Early Snowball.

A grand improvement on the White Box or White Turnip Radish which has been so popular for several years. It is handsome in shape, very early, and has but few leaves, is of a clear white color, solid, juicy, crisp, tender and unsurpassed in flavor. A good sort for forcing.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## White Strasburg.

One of the best large Summer sorts. It covers a long season, as it is good when quite small. The roots are long, very white, crisp and tender.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

## Winter Radishes

### California Mammoth White China.

This is the largest of all radishes. Roots grow ten to twelve inches long and are solid, tender and crisp. Keeps well through Winter.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

## China Rose Winter.

One of the best Fall and Winter varieties; a favorite with market gardeners; bright rose color; flesh white, firm and of superior quality.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

**BLACK SPANISH LONG.**— Standard Winter sort; has good flavor and keeps well.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 75c.

**BLACK SPANISH ROUND.**— Same as long, except shape. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 75c.



## "Diamond Quality" SQUASH



**CULTURE.**— The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but squash is less particular as to soil. The Summer varieties should be planted four to six feet apart each way, and the Winter sorts eight to ten feet. Three plants are sufficient to a hill.

### DIAMOND

No. 4

Best Fertilizer  
for Squash

## Summer Varieties

### Mammoth White Bush Scallop.

The best Summer sort for the market; very productive and of good size.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Early Yellow Mammoth Bush Scallop

An early, flat, scallop-shaped variety; color yellow; flesh pale yellow and well flavored; very productive. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Mammoth Summer Crookneck.

Early, prolific, solid, curved neck; skin yellow, thin, hard and warty; flesh tender and of good quality. Twice as large as the ordinary Crookneck and several days earlier.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 70c.

## Winter Varieties

### True Hubbard.

The best seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Keeps perfectly through the Winter. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 85c.

### New Delicious.

This new Fall and Winter squash resembles the old Hubbard; average weight is between five and ten pounds. Seed cavity small; flesh exceedingly thick, compact, fine grained; color, golden orange. The flesh is meaty, granulated, tender and almost of mealy dryness, cooking sweet and rich, whether steamed, baked, boiled or made into pies.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 85c.

### Boston Marrow.

Skin yellowish, very thin; flesh dry and fine grained; of unsurpassed flavor.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Sibley, or Pike's Peak.

Shell smooth, thin and of a pale green color: the flesh is thick, solid, deep orange color; very dry, fine grained with a delicate flavor.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., 90c.

### Mammoth Chili.

The largest of all Squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00.

### White Summer Crookneck.

Similar to the Yellow Crookneck, but of a beautiful ivory white and unsurpassed quality

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 70c.

### English Vegetable Marrow.

Oblong, dull yellow skin, very prolific and of finest table quality.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 65c.

### Fordhook.

Oblong in shape, eight to ten inches long, with thin, yellowish skin, slightly ridged. One of the finest Summer Squashes, and if left to ripen makes a splendid Winter sort.

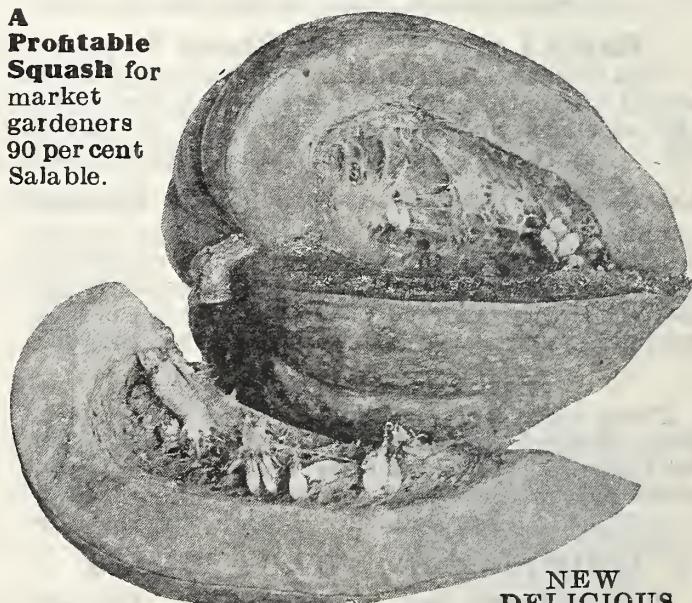
Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 70c.

### Golden Hubbard

The same in size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color, and somewhat earlier. It is also a long keeper. One of the very best Fall and Winter sorts yet introduced. Maturing before the frosts; is vigorous and wonderfully productive.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

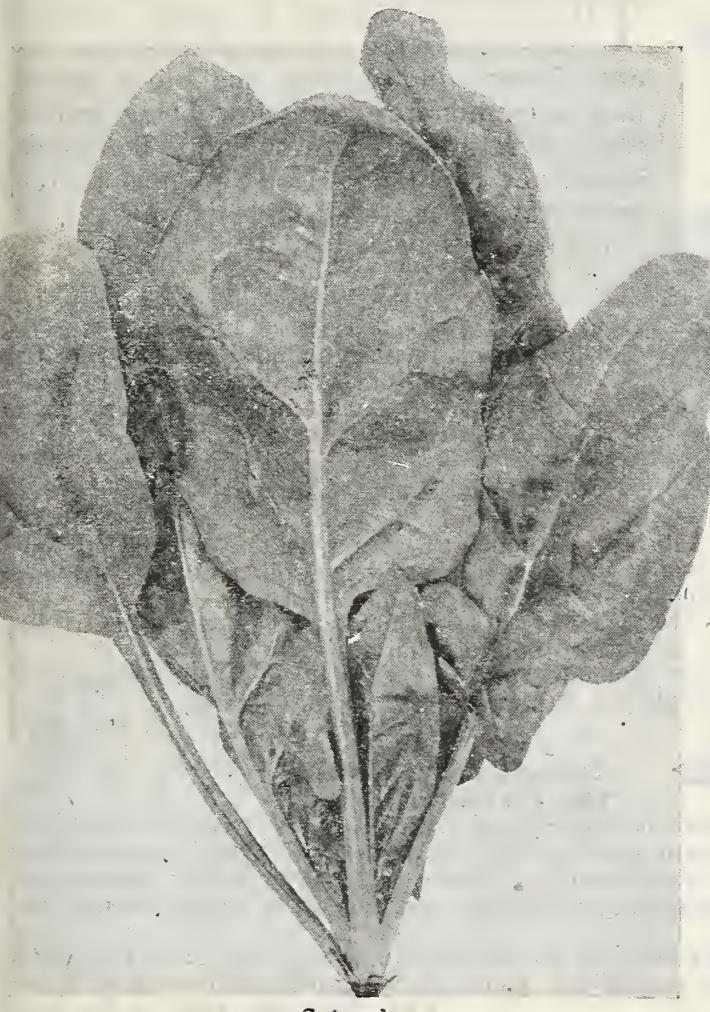
A  
Profitable  
Squash for  
market  
gardeners  
90 per cent  
Salable.



NEW  
DELICIOUS

## SPINACH

This is an important gardener's crop, of easy culture.



Spinach

For Spring and Summer use, sow either broadcast or in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession.

### Prices are Uniform on All Varieties

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 35c.

**Improved Thick Leaved.** Variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color, and quality when cooked. Best for market gardeners.

**Savoy Leaved.** Very early; of upright growth; leaves pointed. Plant in the Autumn for Spring use; grows quickly.

**Victoria.** Leaves large, tender and of good quality; good market sort.

**Prickly Winter.** Hardest variety; may be sown in the Fall; seed prickly; leaves long, pointed, thick and succulent.

**Long Standing.** An improved variety for general use; slow going to seed.

## SALSIFY or Vegetable Oyster

Salsify is a nutritious and wholesome vegetable, having the appearance of a small parsnip; in flavor closely resembling oysters, for which it is, in that respect, a good substitute. It is rapidly coming into more general use. Sow early in Spring, in drills a foot apart, and when two or three inches high thin out to three or four inches. Its general culture is the same as that recommended for carrots. The roots are perfectly hardy and may remain in the ground during Winter, or may be stored in dry earth or sand.

**Mammoth Sandwich Island.** The leading variety; produces a large crop of straight, smooth roots. Pkt., 5c; oz., 10;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

## Tobacco

Sow the seed thinly in beds, as early as they can be well prepared. Cultivate thoroughly, transplanting when six inches high to rows four feet apart each way.

### Connecticut Seed Leaf.

Hardy, and the best adapted to cool localities, and for general use.

Pkt., 5c; oz., 20c; 2 oz., 35c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

### Havana.

Of fine texture and delicate flavor.

Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c.

## Tree Seed—for Nurserymen

Growers wanting large quantities should give us their orders early. Prices quoted on request.

Single pound prices are by mail, postpaid.

### Apple Seed.

French Crab. Oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Cherry Pits.

Mazzard.  $\frac{1}{4}$  lb., 15c; 1 lb., 50c.

Mahaleb. Oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 80c.

### Peach Pits.

For Nursery Stock. Lb., 20c; 100 lbs., \$2.25.

### Quince Seed.

Oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.10.

### Locust.

Yellow or Black. Oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

Honey. Oz., 10c;  $\frac{1}{4}$  lb., 25c.

### Pear Seed.

French. Oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.50.

Japanese. The best imported for nursery stocks.  
Oz., 30c;  $\frac{1}{4}$  lb., 65c; lb., \$2.25.

### Walnut, English

Imported and Domestic

We offer new crop, our own direct importation from the best French growers; also Oregon grown from grafted stock. In the most desirable varieties: **Mayette** and **Franquette**.

Write for prices on large orders.

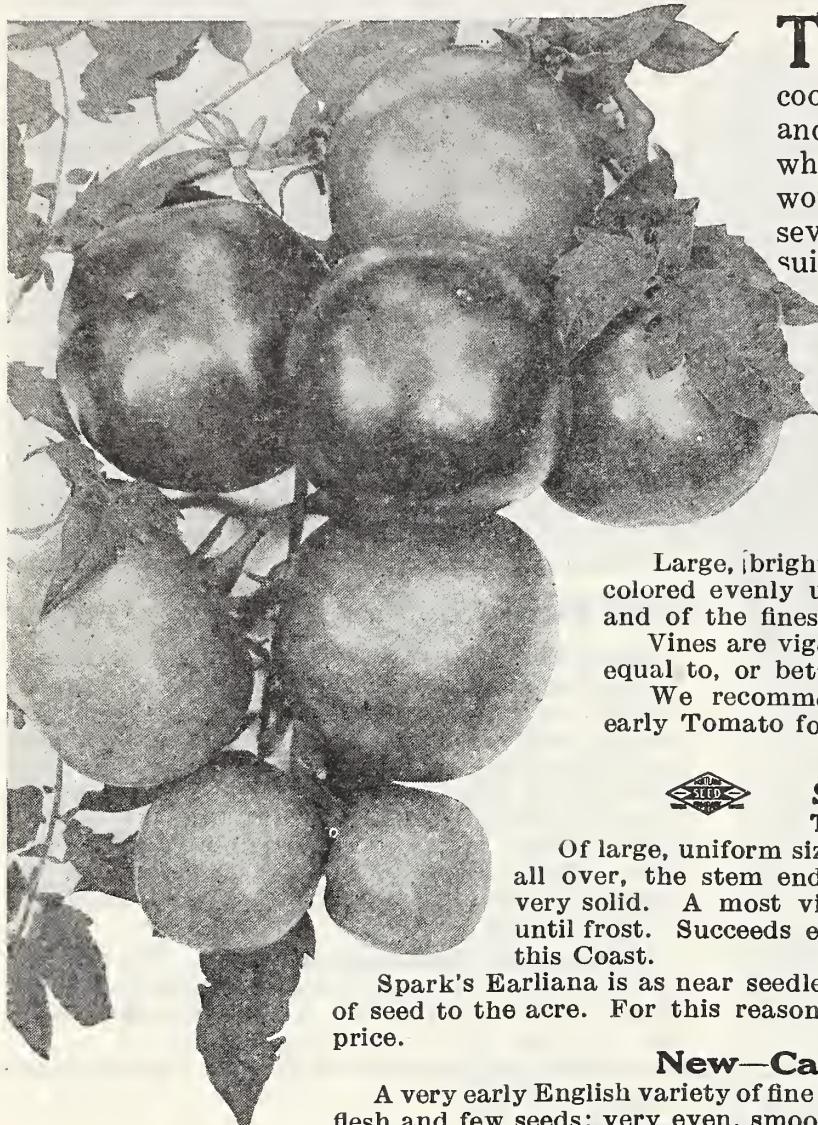
2c each; \$1.50 per 100 nuts.

## "Diamond Quality" Nursery Stocks

are Vigorous, Healthy and True to Name  
Ask for our 64-page Catalog.



# TOMATOES



THE NEWER types of hardy, prolific Tomatoes are better adapted to the cool Coast climate than the older sorts; and splendid crops are now being grown where heretofore it was thought Tomatoes would not thrive. A good plan is to try several varieties and find which is best suited to your special conditions.

**CULTURE.**— Sow early in hotbeds, and as soon as they have four leaves transplant into shallow boxes. Harden off, and set out as soon as danger of frost is past. An ounce of seed will produce 3,000 to 4,000 plants.

## Chalk's Early Jewel



Large, bright red, smooth, round fruits, very deep and colored evenly up to the stem; very solid, almost seedless and of the finest flavor.

Vines are vigorous, not subject to blight, and yield fully equal to, or better than, Earliana.

We recommend Chalk's Early Jewel as the very best early Tomato for either market or home gardens.

**Pkt., 10c; oz., 20c; ¼ lb., 60c.**



## Spark's Earliana. The Earliest Tomato.

Of large, uniform size and beautiful red color. Ripens thoroughly all over, the stem end coloring up perfectly. Almost seedless and very solid. A most vigorous grower and heavy bearer, continuing until frost. Succeeds everywhere, and especially recommended for this Coast.

Spark's Earliana is as near seedless as any tomato, giving but 12 to 15 pounds of seed to the acre. For this reason the genuine seed can never be sold at a low price.

**Pkt., 10c; oz., 15c; ¼ lb., 50c.**

## New—Carter's Sunrise

A very early English variety of fine flavor and healthy, vigorous growth with solid flesh and few seeds; very even, smooth and shapely. Color, bright, rich scarlet. Is also one of the best forcing varieties.

**Pkt., 25c.**

## Livingston Globe

### One of the Best Early Tomatoes.

#### Hardy and Blight Proof.

Fruits are of large, even size; very early; ripen clear through and are always smooth, firm and round; with solid meat and few seeds. Color is a beautiful glossy, rose-tinged purple; very productive. Livingston's Globe is of delicious table quality and will keep longer than any other Tomato. Is also an excellent forcing variety.

**Pkt., 10c; oz., 25c; ¼ lb., 75c.**

## Livingston's New Coreless.

The most perfect shape canning variety ever produced. Large size, globe shaped, full at stem end, bright red, a strong grower and big cropper.

It is immensely productive, clusters of four to seven fruits are produced at six to eight inches apart along the stem. All of the fruits are of marketable size, and many of them are quite large, twelve to fifteen ounces. Always free from green core; ripens all over and through and right up under the stem, all at once. A grand, good slicing variety; the seed cells being surrounded by bright red, heavy, meaty and delicious flesh, which is slightly acid.

**Pkt., 10c; oz., 30c; ¼ lb., 95c.**

## Ponderosa

The largest Tomato, fruits are solid and of a purplish red color, sweet and of good quality.

**Pkt., 10c; oz., 40c; ¼ lb., \$1.00; lb., \$3.00.**

## New Stone.

This new variety has obtained great popularity with canners, growers and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color a desirable red. In shape, perfectly smooth and thicker from stem to blossom end than most varieties, making it very **handsome and salable**. All speak in highest terms of its beautiful color, its wonderful yielding properties, its unequalled firmness.

**Pkt., 5c; oz., 15c; ¼ lb., 50c.**

## Comet—Forcing.

The very best forcing variety and a general favorite with greenhouse growers. Color is a beautiful scarlet; fruits are of good size, very smooth and uniform. We offer a select strain from inside stock.

**Pkt., 25c.**

## Tomato Plants

STANDARD VARIETIES FOR SEASONABLE DELIVERY—FINE, HEALTHY, TRANSPLANTED AND POT GROWN PLANTS—Safely Packed and Shipped to Any Point in the Northwest. See Plant Dept.

## TOMATOES—Continued

### Atlantic Prize.

In point of earliness, this undoubtedly takes the lead. In size, shape and color it compares favorably with later sorts. Color, bright red.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c.

### Quarter Century.

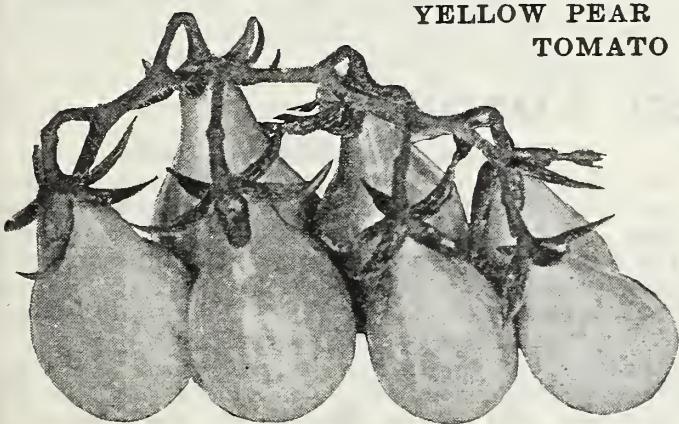
A grand, new dwarf tomato. The fruit is large and heavy and of superior flavor; color, deep red. Fine for home garden.

Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c.

### Well Known Standard Varieties.

<b>ACME.</b> The well known, standard, bright pink Tomato...	5c	15c	$\frac{1}{4}$ lb.	\$0.50
<b>DWARF CHAMPION.</b> Dwarf, upright growth; smooth, purple fruit. ....	5c	25c	$\frac{1}{4}$ lb.	.75
<b>GOLDEN QUEEN.</b> This is a first-class, large, smooth, pure yellow tomato. ....	5c	25c	$\frac{1}{4}$ lb.	.75
<b>LIVINGSTON'S BEAUTY.</b> Large; good quality; deep red in color. ....	5c	20c	$\frac{1}{4}$ lb.	.55
<b>LIVINGSTON'S FAVORITE.</b> Excellent for general crop; bears heavily.....	5c	20c	$\frac{1}{4}$ lb.	.55

### YELLOW PEAR TOMATO



### Yellow Pear.

A small pear-shaped tomato, borne in great profusion, vine literally covered with large clusters of fine, solid fruits; excellent for preserving, and for use in salads and cooking is superior, as flesh is not watery. Very hardy. To this class belong **Yellow Plum** and **Red Cherry**. All same price.

Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c.

### FERTILIZERS

Are not an expense. They are a safe investment, sure to return many times their cost.

*Our Fertilizer Book and the Books of the German Kali Works Free on request.*



GROUND  
CHERRY  
or  
HUSK  
TOMATO

### Ground Cherry, or Husk Tomato.

Grows to great perfection under ordinary culture, yielding abundantly; very much prized for preserving; should be in every garden.

Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., \$1.00.

### Tomato Culture—by Littooy Post Paid 25c.

## TURNIPS

### Ruta Baga or Swede

FOR feeding stock in Fall and Winter there is nothing superior to Turnips or Ruta Bagas, as they are much liked by all kinds of stock and serve to keep them in good condition. We can not too earnestly recommend farmers to increase their sowings largely, for we are sure the crop will prove remunerative.

### Bangholm Pajbjerg Improved Thick Leaved.

This variety was awarded a first-class certificate by the Danish government for heaviest yield, having given 49 tons per acre. In shape is a little more elongated than the Globe types. This variety is recommended as the best of its class.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Monarch or Tankard.

This is a yellow fleshed sort, having very large, tankard-shaped roots; flesh very solid, fine grained, of fine flavor; grows well out of the ground and yields large crops.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Skirving's.

Enormously productive; flesh yellow, solid and sweet. One of the best for field culture.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### White Sweet Russian.

This variety is most excellent, either for table or stock. It grows to a very large size; flesh white, solid, of a firm texture, sweet and rich; an excellent keeper.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Improved American Purple Top.

The leading standard variety, being very distinct in type, attaining a wonderfully large size; immense yielder. The flesh is very firm, superior in every way, valuable alike for all purposes

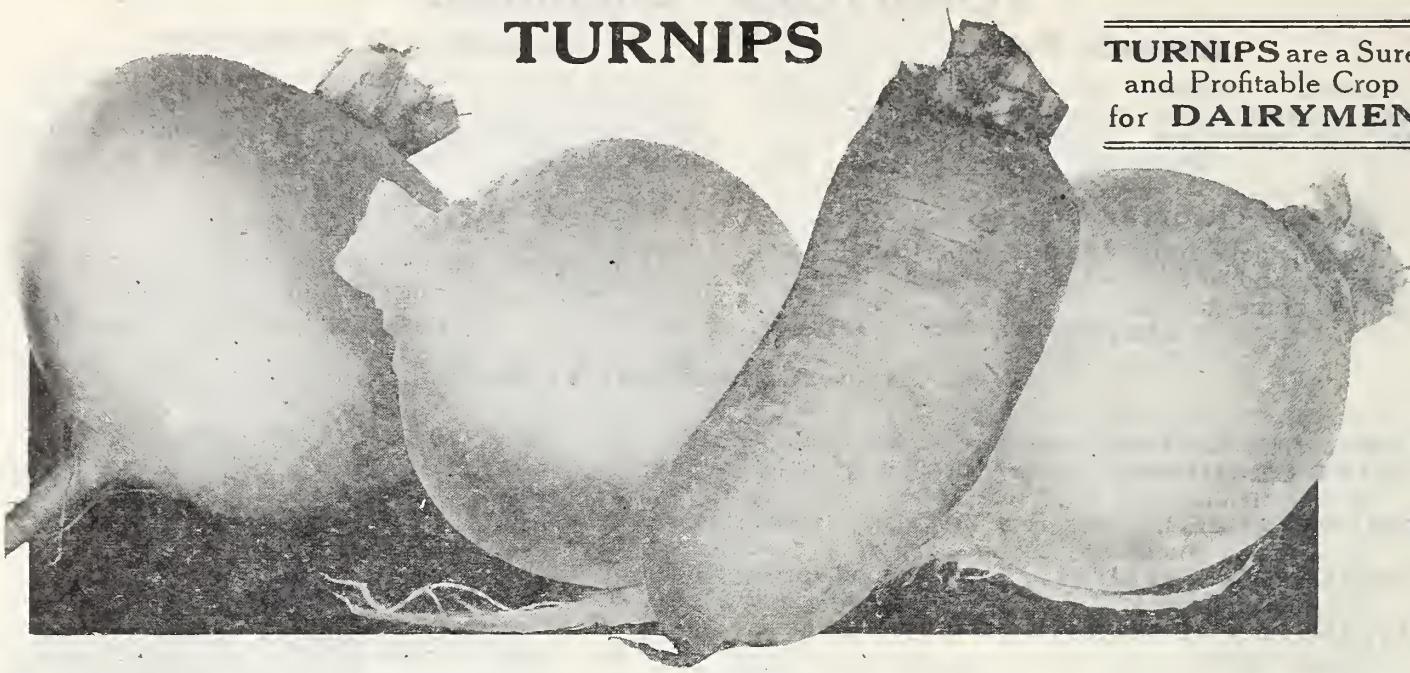
Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

## Cut Worm Food

Protects Tomatoes, Cabbage, Melons, Cucumbers and Other Plants—easily applied—Inexpensive. Price, 1-lb. pkg. 25c.



# TURNIPS



**TURNIPS** are a Sure  
and Profitable Crop  
for DAIRYMEN

FOR early use sow the small sorts as soon as the ground can be worked in the Spring, in drills fourteen inches apart. As the seed is very fine, it should be covered but slightly, except in very dry weather. For Fall and Winter use, sow the early kinds during July, August and September.

## Early Garden Turnips



### Early Purple Top Milan.

This variety is ready for the table sooner after planting than any other yet introduced. Top small, erect, strap-leaved; bulb a deep purple above, white underneath; flesh white, firm and delicate.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 80c.



### Early White Milan.

Same as Purple Top Milan, but pure white, sweet and tender; best early market variety.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 80c.

### Early White Flat Dutch.

One of the very best and most universally grown. Small, erect top, round, flat; flesh, white, firm, but very tender and sweet. Of quick growth, it is soon ready for the table and keeps well.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

## Main Crop Turnips

### Danish Bortfelder

This is a superior Danish variety introduced as an improvement on Cow Horn, being a heavier yielder and growing straight. It is also sweet and fine-grained, being a good table Turnip. Shape is long and tapering, but grows well up out of the ground. Sow in Spring for Summer, and in mid-Summer for Winter feeding.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### White Egg.

Is perfectly smooth, of a pure, clear white, growing half out of the ground, and at times to the size of a Ruta Baga, being a very choice kind for table use; of excellent flavor, sweet and mild. Pulls clean from the ground; thin, snow-white skin.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Pomeranian White Globe.

One of the most productive kinds, and in good, rich soil, roots will frequently grow to 12 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Purple Top Strap Leaf.

A leading white-fleshed variety, and one of the best, either for the family, market garden or field crop. It is medium size, and produces a large crop. The flesh is firm, but tender, and of a superior rich buttery flavor. A good keeper.

Pkt., 5c; oz., 10c; 2 oz., 15c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Early Snowball.

Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp, solid and of fine flavor. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Orange Jelly.

#### Or Robertson's Golden Ball.

Undoubtedly one of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

### Purple Top White Globe.

A large, globe-shaped variety; purple above the ground. It is handsome and of excellent quality, and recommended both for the family garden and field crop.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Large White Norfolk.

A white variety, usually attaining a very large size. Extensively grown for stock feeding. The leaves are also used for greens. It is hardy and may remain in the ground all Winter. Yields very large crop. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

### Cowhorn.

Sometimes called Long White. Slightly crooked. Pure white except a little shade of green at the top. Grows half out of the ground and is of very rapid growth. Is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Oregon, as it is an immense yielder.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

### Yellow Aberdeen.

Round, medium size; light yellow. Produces a large crop; is hardy and keeps well; flesh very firm but tender and sweet. A great favorite with the dairymen.

Pkt., 5c; oz., 10c; 2 oz., 15c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

# Herb Seeds--Sweet, Pot and Medicinal

Every garden should contain a collection of Herbs for flavoring and medicinal purposes. They are almost a household necessity; are easily grown, and many of them are very ornamental.

**CULTURE.**— Herbs in general delight in rich, mellow soil. Those marked with an (\*) are perennial, and when once obtained in the garden may, with a little attention, be preserved for years. Sow the seeds early in the Spring in shallow drills, one foot apart. We offer some of the most useful and popular. They should be cut on a dry day, just before they come into full bloom, and tied in bunches and hung up or spread thinly on a floor where they can dry quickly. When dry and crisp, rub fine and bottle.

All the Following Herbs, 5c per Packet. Except where noted.

	Oz.	1/4 lb.	Oz.	1/4 lb.
<b>ANISE.</b> — Seeds have useful medicinal properties; also used for flavoring...10c		\$0.25		
<b>*BALM.</b> — Used for culinary purposes and for making Balm tea.....25c	.65			
<b>BASIL.</b> — Used for seasoning soups, having a decided flavor of cloves....15c	.45			
<b>BORAGE.</b> — Excellent for bees, flowers are also in request for garnishing..15c	.40			
<b>*CHIVE.</b> — Has mild onion flavor; grows in grass-like clumps; much used for flavoring. Pkt. 10c.....50c				
<b>CORIANDER.</b> — Seeds used in confections; leaves for soups and salads. Very aromatic.....15c	.25			
<b>CARAWAY.</b> — For flavoring, the seeds being used extensively by bakers and confectioners.....10c	.25			
<b>*CATNIP.</b> —(Cat Mint). Pkt. 10c...40c	1.00			
<b>DILL.</b> — The flower heads and seeds are used in soups, stews and pickles; leaves have same flavor and can be used in like manner. ....10c	.25			
<b>*FENNEL.</b> — For garnishing and fish sauce.....10c	.25			
<b>FENUGREEK</b> —For flavoring .....10c				
<b>HYSSOP.</b> — Used medicinally.....25c	.75			
<b>*HOREHOUND.</b> — Used medicinally as a cure for colds.....20c				
<b>*LAVENDER.</b> — By distillation produces the well-known Lavender water, the flowers for perfuming wardrobes, etc.....25c \$0.75				
<b>MARJORAM.</b> — The Sweet aromatic leaves in either a green or dry state are used for flavoring.....20c .60				
<b>*PENNYROYAL.</b> — Used medicinally Pkt. 10c				
<b>*PEPPERMINT.</b> —For flavoring. Pkt. 10c				
<b>*ROSEMARY.</b> —Infusions of the leaves are used in medicinal beverages. Produces an aromatic oil.....35c				
<b>*RUE.</b> — Leaves are used in medicine, also for croup in poultry.....30 .75				
<b>*SAGE.</b> — The leaves and tender tops are used in stuffings and sauce; also in the beverage known as Sage tea...15c .50				
<b>SAFFRON.</b> — Used for flavoring.....15c				
<b>SAVORY.</b> —Summer—Used for flavoring.25c				
<b>SAVORY.</b> —Winter.....25c				
<b>THYME.</b> — Broad leaved, used in soup stuffing and sauce. Pkt. 10c.....45 1.25				
<b>*WORMWOOD.</b> — Taken as a tonic in the form of tea.....25c				
<b>TANSY.</b> — Used medicinally, as tea and bitters. Pkt. 10c.....35c				

## HERB SEEDS FOR FLAVORING

### Anise.

Anise seed for flavoring. 1/4 lb., 15c; lb., 50c.

### Coriander.

Coriander seed for flavoring.

1/4 lb., 15c; lb., 30c; 100 lbs., market price.

### Poppy

Seed used for flavoring. 1/4 lb., 15c; lb., 35c.

### Celery.

For flavoring. Oz., 10c; 1/4 lb., 20c; lb., 70c.

### Caraway.

We keep constantly on hand a large stock of well preserved seed for the use of Druggists, Bakers and Confectioners.

1/4 lb., 10c; lb., 45c; 100 lbs., market price.

### Dill.

Used to flavor soups, stews and pickles. The leaves possess similar qualities, and can be used in the same manner as the seeds. 1/4 lb., 20c; lb., 50c.

### Mustard.

For flavoring and pickling.  
Lb., 15c; postpaid, 30c; 100 lbs., market price.

## FOREIGN NAMES OF HERBS

A Stands for Annuals or those generally used for such.	B For Biennials.	P For Perennials.
<b>ENGLISH</b>	<b>FRENCH</b>	<b>GERMAN</b>
A Anise	Anis	Anis
P Balm	Melisse-Citronelle	Citronen-Melisse
A Basil	Basilic-grand	Basilikum
A Borage	Bourrache	Boretsch
A Caraway	Cumin des pres	Feld-kümmel
P Catnip	Cataire	Katzenminze
A Coriander	Coriandre	Koriander
A-B Dill	Aneth	Dill
P Fennel, Sweet	Fenouil	Fenchel
A Fenugreek	Fenugrec	Bockshornsamen
P Horehound	Marrube Blanc	Andorn Kraut
P Hyssop	Hysoppe	Isop
P Lavender	Lavende	Lavendel
A-B-P Marjoram, Sweet	Marjolaine	Majoran
P Mint, Common	Menthe des Jardins	Münze
P Rosemary	Romarin	Rosmarin
A Rue	Rue	Raute
P Sage	Sauge	Salbei
A Saffron	Safran	Safran
P Sorrel	Oseille	Sauerpfeffer
A Savory, Summer	Sarriette	Bohnenkraut
P Tansy	Tanaise	Gemeiner Rainforn
P Thyme	Thym	Thymian
P Wormwood	Absinthe	Wermuth
		ITALIAN.
		Anacio
		Melissa
		Basilice
		Boragine
		Carvi
		Cataria
		Coriandorlo
		Aneto
		Finocchio
		Foenungrasciene
		Marrubio
		Issopo
		Lavanda
		Maggiorana
		Menta
		Rosmarino
		Ruda
		Salvia
		Zafferano
		Acetosa
		Santoregia
		Atanasia
		Timo
		Assenzio



**"Diamond Quality"**

# SEED POTATOES

**True Type Market Size**

**POTATOES** are as sure and as profitable crop — investment and labor considered — as can be grown; but best results can only be secured by growing varieties that are suited to your soil and climate, and using good seed, which must be properly planted and cared for. See Government Bulletin of the U. S. Department of Agriculture No. 47.

The select strains of Seed Potatoes that we offer for the Northwest, have been carefully bred up by experts who have made a life study of Potato growing, and their care and patient effort has resulted in establishing fixed strains of almost perfect types that cannot be duplicated elsewhere. We offer a complete assortment of splendid varieties suitable for all soils and conditions under which Potatoes can be grown and the past season has again proved the superiority of the varieties and seed stock that we grow and offer. Our own seed crop is large and of superior excellence.

## Early Varieties

### P. S. Co.'s "Earliest of All"

**Never Known to Blight.**

We have yet to find an early potato that can compare with our "**Earliest of All.**" Its quick growth and early maturity give the ground for July planting, and a **second crop can be grown the same season.** Summer drouth does not affect it, for its growth is complete before it can be injured. Planted early is ideal for "Dry Farming."

*They can be had ready for baking nine weeks from planting, and fully matured in 12 weeks.*

"**Earliest of All**" is a healthy, vigorous grower not subject to blight or disease and does not make a second growth. Keeps as well as any late potato.

A handsome, shallow eyed, white-skinned potato of the finest table quality.

**Price, 1 doz. eyes, postpaid, 30c; 4 lbs., whole potatoes, 60c. postpaid; by Freight or Express, per peck, 75c;  $\frac{1}{2}$  bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.**

**PLANTED EARLY**  
is the best potato for  
**DRY FARMING**

#### "EARLIEST OF ALL"

### Early Freeman

A vigorous, productive, early potato of oval shape with russet skin, fine grained, white and floury. Not quite as early as "**Earliest of All.**" but much earlier and a far better yielder than any other early variety. Tubers shapely and uniform, with very few small ones. We specially recommend **Early Freeman** as a potato of **real merit.** Try it.

**Price, mail, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 60c, postpaid. Frt. or Exp., pk., 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.**

### Early Sunrise

The best early pink variety — earlier than Rose, about the same depth of color, not so flat but a smoother potato, a bit more slender than Rose; Sunrise is hardy, blight proof, and the best yielder of its type.

**Price, postpaid, 4 lbs., whole potatoes, 60c; Frt. or Exp., peck, 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.**

### New—"PRODUCER"

A large smooth oval white potato with shallow eyes, of finest table quality and a hardy vigorous grower, that earned its name of "**Producer**" on account of its enormous and never failing yield.

We have had "**Producer**" on trial for several seasons and it has always given a big crop even when conditions were very unfavorable and in dry weather. We hesitated to offer a new potato, but "**Producer**" has been such a success that we consider it a valuable sort—especially for dry or light soil as it will give a good yield where other varieties would fail. **Price, 1 doz. eyes, postpaid, 30c; Whole Potatoes by mail, 4 lbs., postpaid 60c; by Freight or Express customer's expense, Peck 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.**

### Early White Prizetaker

One of the finest of all early sorts; oblong in form, 4 or 5 inches in length, with white, smooth skin and few eyes. It is a very superior cooking potato, baked or boiled, cooking up dry and floury.

**White Prizetaker** has important advantages over other early Potatoes, as its white skin, large size and good keeping qualities make it an ideal main crop variety, that sells at the best price. We always advise early planting, as the crop will be larger and better.

**PRICE, postpaid, 4 lbs. whole potatoes, 60c; Freight or Express, peck, 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.**

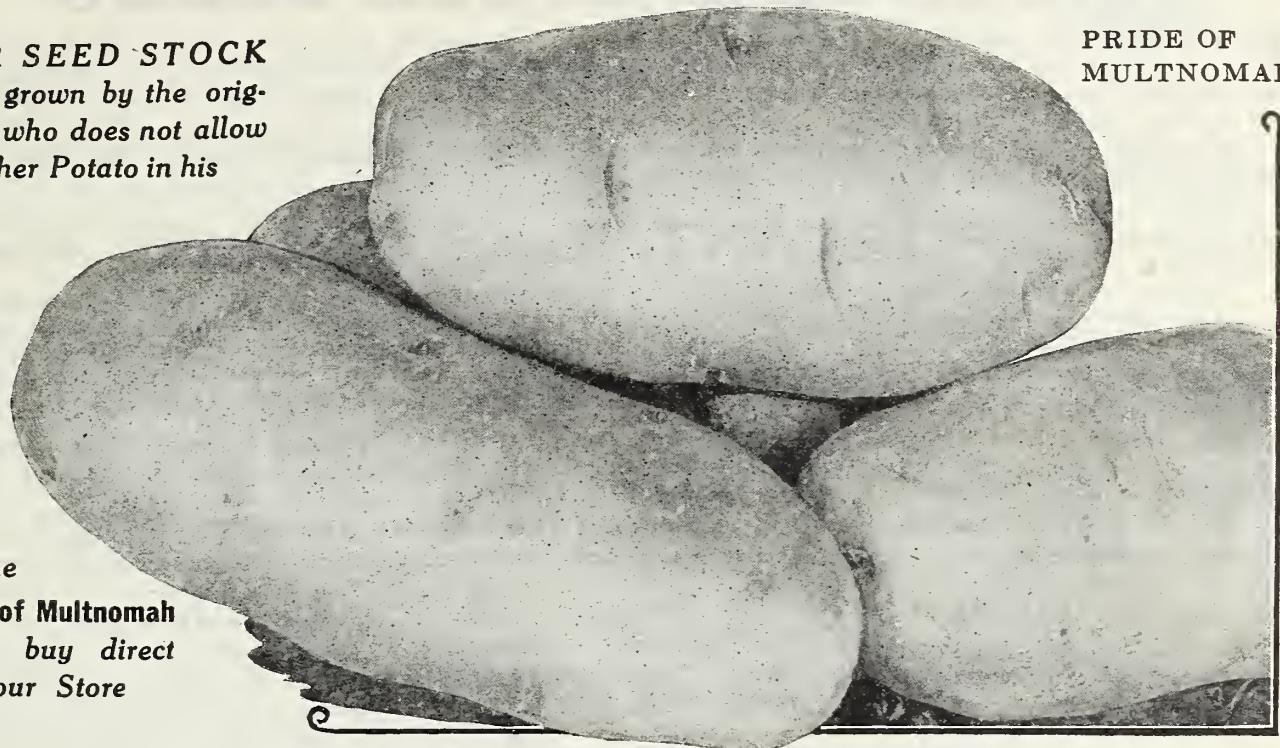
### Early Rose

Our stock of this popular variety is a special improved strain of our own growing; is very vigorous and extremely early.

**Price, postpaid, 4 lbs. whole potatoes, 60c; Frt. or Exp., peck, 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.**

## POTATOES—Continued

OUR SEED STOCK  
is grown by the originator who does not allow any other Potato in his fields,  
and  
to  
be  
sure  
of  
having  
the  
Genuine  
Pride of Multnomah  
always buy direct from our Store



PRIDE OF  
MULTNOMAH

### PRIDE OF MULTNOMAH—Main Crop

Excels in Yield and Table Quality

**PRIDE OF MULTNOMAH**, introduced by us six years ago, stands at the head of the list of main crop potatoes, excelling in yield, uniformity, and table quality; being fine grained, of snowy whiteness and for baking or boiling we have never known its equal.

The skin is thin, smooth and white; eyes shallow, shape distinctive.

We believe **Pride of Multnomah** is blight and disease proof, and we know it to be drouth resistant to a remarkable degree, having a mass of fine fibrous roots that retain the moisture, and promote a vigorous growth.

*PRIDE OF MULTNOMAH is the best keeping potato ever known, and should be planted early to insure perfect maturity and finest quality.*

Order now and have your potatoes when you are ready to plant. We have never had enough to fill all orders. Don't you be the one that is disappointed.

PRICE, postpaid, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 60c; Freight or Express, 1 pk., 75c;  $\frac{1}{2}$  bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

### New—Snow Potato

A splendid early maturing main crop Potato that gives a good yield on poor or light soil.

This fine potato, originating in Maine—a State famous for the quality of its potatoes—has proved a wonderful producer on poor soils where other varieties would not thrive.

Given good soil and culture, "Snow" produces enormous crops of fine large, oval tubers, slightly flattened, having shallow eyes and netted skin. "Snow" is fine grained, flaky and of excellent quality. The luxuriant vines are dark green. The potatoes grow close together with very few small ones.

"Snow" is a main crop potato, but makes an early and quick growth. Try it.

PRICE, 1 doz. eyes, postpaid, 30c; 4 lbs. whole potatoes, 60c; by Freight or Express, per peck, 75c;  $\frac{1}{2}$  bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

### Burbank

A standard commercial variety. We can offer a splendid strain of select Burbanks, not the "run-out" stock generally seen, but the genuine article, which is a really good potato.

Price, postpaid, 4 lbs. whole potatoes, 60c. Freight or Exp., peck, 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.50; 100 lbs., \$2.25.

### Hundred Fold

A splendid new main crop variety of the same general type as Uncle Sam, but surpassing that excellent variety in many ways, being a splendid dry land Potato, an enormous yielder and of the finest quality, being white, dry and mealy at any stage of development. The skin is russet, which is a mark of quality.

Hundred fold is very hardy, with small vines, but the tubers are large and uniform.

Price, postpaid, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 60c; Freight or Exp., pk., 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.

### American Wonder

American Wonder is not only one of the best main crop potatoes, but is also one of the earliest potatoes grown. It is a strong grower, and great producer. Tubers white, large and uniform in size; elongated, slightly compressed, with few eyes, and is of good quality.

Price, postpaid, 4 lbs. whole potatoes, 60c; Freight or Exp., peck, 75c;  $\frac{1}{2}$  bu., \$1.00; bu., \$1.50; 100 lbs., \$2.25.

Write for price in quantity.

### Formaldehyde for Potato Scab.

Soak the tubers before cutting for one hour and a half in a solution of 1 lb. (or pint) of Formaldehyde to 30 gallons of water. The potato fungus lives in the soil and on old vines; hence it is wise to keep it off your land by using Formaldehyde for your seed potatoes.

Price, pint bottle, 40c; 2 bottles, 75c; gal., jug, \$2.50, sent by Freight or Express only, at purchaser's expense. Cannot be mailed.



# FIELD AND FARM SEEDS

HERE are many varieties of grasses and forage plants offered by Eastern seedsmen (often under new names) that will not give profitable crops in our climate, and to avoid disappointment, we refer you to the following list, which has been carefully selected and contains the most desirable varieties for general and special purposes.

A careful reading of the following pages will give you much valuable information that has required years of observation and experimenting to obtain.

## IMPORTANT, Read Carefully

Clover, Grass and Field Seeds are subject to market changes, therefore we can not print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted; or send in your order at catalog prices. **We guarantee that we will give you full value for the money sent**, whether the price at the time you order be higher or lower, or if the difference is very great, we will notify you before shipment. **No Premiums on Grass and Field Seeds.**

**Single pound prices include postage. If ordering by freight or express deduct 10c per pound;** 100-pound prices subject to market changes. Seed to cover amount remitted always sent unless otherwise ordered. **Write for prices on large quantities.**

**YOU WILL ALWAYS GET YOUR MONEY'S WORTH.**

### Artichokes

There is an unlimited market for Hogs and Artichokes are the cheapest and best feed. They never fail. They are also valuable to dairymen, being cheap, and good milk producers.

Planted and cultivated same as potatoes. Of great value for feeding stock. They are the best hog feed known; are remarkable for their fattening properties, great productiveness (over one thousand bushels having been raised on one acre) and ease with which they can be grown. They need not be dug. Turn the hogs into the field, and they will help themselves by rooting. One acre will keep from twenty to thirty hogs in condition from October until

April, except when the ground is frozen too hard for them to root. They are said to be a preventative of cholera, and other hog diseases, and are also highly recommended for milch cows, increasing the yield of milk and at the same time improving their condition. Plant ten bushels per acre early in the Spring.

**Note.**—Tubers on hand from January to May.

**Per lb., postpaid, 15c; 100 lbs., \$2.00.**

### Cow or Thousand Head Kale

#### Plants In Season

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by Agricultural Colleges and Government Stations. Cow Kale should be grown in the same manner as cabbage. Make the rows 4 feet, plants 3 feet apart in the row. Can be set as late as July. Write for full information on Planting and Feeding.

**Postpaid, 1 oz., 10c; 1/4 lb., 20c; 1 lb., 60c.**

### Flax Seed

We have a splendid lot of selected recleaned Western-grown Flax, new crop, large plump seed.

**Per lb., postpaid, 20c; 100 lbs., \$6.00.**

### BUCKWHEAT

**Buckwheat** is a valuable crop that can be easily grown wherever wheat will grow, producing a good yield even on light or poor soil and under favorable conditions is very profitable, being in big demand for milling — and is also the best "Bee pasture."

Sow 36 lbs. per acre in drills, 48 lbs. broadcast. **We recommend the Japanese variety.** Common, per lb., postpaid, 20c; 100 lbs., \$4.50.

**Silver Hull.** Of a light gray color, rounder than the common; has a thin husk; matures earlier and yields heavily. An excellent milling variety.

**Per lb., postpaid, 20c; 100 lbs., \$4.50.**

**Japanese.**—Ripens early — is hardy and yields the largest crops. The grains are extra large, dark brown, very thin hulled and makes the highest grade of flour. Good seed stock has been very scarce for several seasons, but we now have a fine lot which we can offer at a very low price.

**Per lb., postpaid, 20c; 100 lbs., \$4.50.**

Typical Plant of Cow Kale



A quarter of a lb. of seed will produce enough Kale plants for one acre.



**Write for Prices on 100-Pound and Ton Lots.**

## BARLEY

**BARLEY** is a shallow feeder, the roots growing near the surface, and requires a rich, mellow soil. Barley responds readily to good tillage and any extra work with the disc and fine tooth harrow will be amply repaid. Do not try to grow upon poor, sandy or wornout soils, or where the ground is not in good condition or well drained. In rotation, Barley follows Corn, Peas, Potatoes, or any cultivated crop, and is the best nurse crop for starting clovers or mixed grasses. Should be planted late after ground is warm and Spring weather settled. Plant two bushels per acre. Crimson Clover planted in the Fall and plowed under after blooming in the Spring, leaves the soil in fine condition for barley.

### New—"Oderbrucker" Barley

This is a Pedigreed strain of 6-row barley, selected and bred by the University of Wisconsin and is considered the earliest maturing, most prolific of all the barleys. This is the variety that was secured at great expense by the Oregon and Washington Railroad Co. for introduction in their territory. We offer the genuine stock of our own growing.

**Price:** 1 lb., postpaid, 15c; Frt. or Exp., 10 lbs., 40c; 100 lbs., \$2.75.

### White Hulless or Bald Barley

**White Hulless, or Bald Barley.**—A grand barley for stock feeding. Grain plump, heavy and when threshed is hulless like wheat. A heavy cropper. When grown and cut for hay it produces a magnificent fodder, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Culture same as Common Barley.

**Per lb., postpaid, 15c; 100 lbs., \$2.75.**

### Beardless Barley

**Beardless.**—The earliest barley known. The straw is about the height of the Common Barley, but better, and will stand up on any land; with good season and land, has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. Many farmers will not grow Barley on account of the long, harsh beards which are so disagreeable in threshing although it is a profitable crop. This is beardless, and as easy to grow and handle as oats. It is becoming more popular each season. **Per lb., postpaid, 15c. 100 lbs., \$2.35.**

### Common Barley

We always aim to have a nice, clean stock of good Seed Barley on hand at all times.

**Per lb., postpaid, 15c; 100 lbs., \$2.25.**

## Field Peas

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog-feed and are quite fattening. Sow, if alone, 120 pounds to the acre; if with other grain, 60 pounds.

### White Canadian

A leading kind; seed almost white; a heavy cropper. **Per lb., postpaid, 20c; 100 lbs., \$4.00.**

### Blue Prussian

Very much like the above, except in color. This variety is largely sold dried for soup peas.

**Per lb., postpaid, 20c; 100 lbs., \$4.00.**

### Swiss

A three-cornered pea; excellent for cooking purposes. Vines small. One peculiarity of these peas is that they are never infested with bugs.

**Per lb., postpaid, 20c; 10 lbs., 90c.**

### Lentils

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage.

**Per lb., postp'd, 20c; 10 lbs., 90c; 100 lbs., \$7.50.**

## Vetches or Tares

### Greatest Forage Plant.

**Common, or Spring.**—(*Vicia Sativa*.) One of the best forage plants that can be grown on the Pacific Coast. Often called Fall Vetches. This is a species of the pea, and is grown very extensively in Western Oregon and Washington. Especially in the Willamette Valley and on the Oregon Coast. It furnishes an abundance of excellent feed, either green or cut and cured for hay. The seed should be mixed with an equal weight of some variety of wheat, oats or rye having a stiff straw, and the mixture sown at the rate of two bushels per acre. Vetches weigh 70 pounds per bushel. Sow in the Fall or early Spring.

**Per lb., postpaid, 15c; 100 lbs., \$5.00.**

**Sand, or Winter Vetches.**—(*Vicia Villosa*.) This variety thrives on poor, arid, sandy soils. It is sown either in the Fall or early Spring, and is generally mixed with rye, which serves to support the plants. It grows to a height of three or four feet, and can be cut twice; first, as soon as the bloom appears, and afterward for seed. The plant is perfectly hardy and makes a very nutritious food.

**Per lb., postpaid, 25c; 100 lbs., \$15.00.**

**White Spring, or Pearl Vetch.**—Equally as valuable as the common vetch for Spring planting for forage or hay crop, soilings or for grain.

**Per lb., postpaid, 20c; 100 lbs., \$5.00.**

## Cow Peas

Are really small beans of vigorous vining habit and heavy foliage of great nutritive value, yielding five to nine tons of green feed per acre, or can be cut and cured like clover. They are great nitrogen gatherers and one of the best fertilizers when turned under. Sow two bushels per acre.

**Whip-Poor-Will.**—Upright, or bush growth, earliest maturing, easily harvested.

**Per lb., postpaid 20c; 10 lbs., 85c; 100 lbs., \$7.25.**

**Clay.**—Of vigorous growth. Excellent for ensilage; can be planted in hills with corn.

**Per lb., postpaid, 20c; 10 lbs., 85c; 100 lbs., \$7.00.**

**New Era**—Early, Prolific, of upright growth, also makes good dry fodder.

**100 lbs., \$7.00.**



Head of  
Feterita

## GRAIN AND FIELD SEEDS—Continued

### The Non-Saccharine Sorghums

Wonderfully productive and of great value as a forage, ensilage or grain crop in dry sections

THE varieties here offered represent the best selections and are highly recommended. They are best drilled in — using 3 to 8 lbs. per acre, depending on variety and condition. Plant in the late Spring after the ground is warm. Cultivate often, throwing the earth toward the plants.

#### Milo Maize

This is one of the sorghums similar to Kaffir corn. Grows erect, with thick, close-jointed stalk. Height, 4 to 7 feet. Heads are very large, giving a heavy grain yield; is drouth resistant, and succeeds on alkali soil. Plant late when ground is warm, 3 to 6 pounds per acre.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

#### Kaffir Corn

An excellent fodder plant. Grows four to five feet high; upright stalk, with numerous large leaves. Greatly relished by cattle and horses. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. It does best sown in drills three feet apart, six to eight pounds per acre.

Per lb., postpaid, 15c; 10 lbs., 90c.

#### Egyptian Corn

Also called Jerusalem Corn or Dhoura.

One of the non-saccharine sorghums, requiring the same growing conditions. Succeeds well in dry sections. Producing small heads on side shoots up to eight on a stalk, the seed is larger than Kaffir corn. Yield is heavy. Makes fine chicken feed. Plant three pounds per acre.

WHITE, Per lb., postpaid, 15c; 100 lbs., \$4.50.

RED, Per lb., postpaid, 15c; 100 lbs., \$4.50.

#### Broom Corn—(Dwarf Evergreen)

Grows from 4 to 5 feet high and makes straw of finest quality, being almost, if not entirely free from crooked brush.

Per lb., postpaid, 20c; 100 lbs., \$8.00.

#### Sugar Cane or Sorghum

Early Amber; a valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre. When fed down while young it makes a rapid second growth.

Price, postpaid, per lb., 20c; 100 lbs., \$6.25.

### Millets

Sow in April, May or June, 12 to 15 lbs. for seed, or 20 to 30 lbs. for hay per acre

#### Common

A well known variety growing from three to four feet high; has broad blades and strong stalks.

Per lb., postpaid, 20c; 100 lbs., \$4.75.

#### Broom Corn Millet

Broom Corn Millet is somewhat variable in character and is divided into several varieties, one of which is sometimes called Hog Millet, as the seed is often used to feed hogs. All of this class are better adapted to produce seed than for pasture.

Per lb., postpaid, 20c; 100 lbs. \$4.75.

#### Early Fortune

Early Fortune Millet has given astonishing yields of both seed and fodder. It is very early and is claimed to be rust-proof. The fodder can be fed to horses and other stock without injury even after the seed has formed, which cannot be done with safety, with most of the millets. The seed is large and of a beautiful red color.

Per lb., postpaid, 20c; 100 lbs. \$5.25

#### FETERITA

This is the most recent of the non-saccharine sorghums to command the attention of "dry farmers" on account of its wonderful yield and drouth resistant qualities, being 20 to 40 days earlier than Kaffir corn and has given immense crops in the driest seasons without having received a drop of rain. Makes splendid fodder as well as giving a good grain yield. Try Feterita

Per lb., postpaid, 25c; 100 lbs., \$10.00.

#### Sow in April, May or June, 12 to 15 lbs. for seed, or 20 to 30 lbs. for hay per acre

#### German, or Golden

An improved variety, yielding a larger crop of seed than the Common Millet. It is also taller than the Common, and yields a heavier crop of hay.

Per lb., postpaid, 20c; 100 lbs., \$5.25.

#### Hungarian

A dwarf annual Millet. It is finer than the Common or German Millets, but produces a closer stand and yields almost as much per acre as the taller varieties. Superior for hay.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

#### New Siberian

New and wonderfully productive. Extremely hardy, and about two weeks earlier than the German Millet, growing four feet in height.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

Prices are subject to market changes without notice.  
YOU WILL ALWAYS GET FULL VALUE FOR THE MONEY SENT



# FERTILIZE WITH AIR!

RESTORE THE NITROGEN to your worn out soil and inoculate your new ground with fresh, virile, nitrogen-fixing bacteria. YOU CAN DO IT WITH

TRADE **FARMOGERM** MARK

*A pure culture of the most active nitrogen gathering bacteria.*

**NITROGEN** is the most important and expensive plant food. The air is four-fifths nitrogen—the soil is full of air—but plants cannot absorb it without the aid of nitrogen gathering bacteria.

**FARMOGERM** makes this vast storehouse of nitrogen quickly available. A one-acre packet costing \$2.00 used on a leguminous crop will gather and store nitrogen equivalent to 1000 pounds of nitrate of soda and at the same time greatly increase the growing crop.



Nitrogen gathering Nodules on Vetch

To insure a Stand—  
Increase the Yield—  
Build up your Soil—  
always inoculate  
CLOVERS, ALFALFA, PEAS  
BEANS VETCH  
COW PEAS SOJA BEANS  
with  
**FARMOGERM**

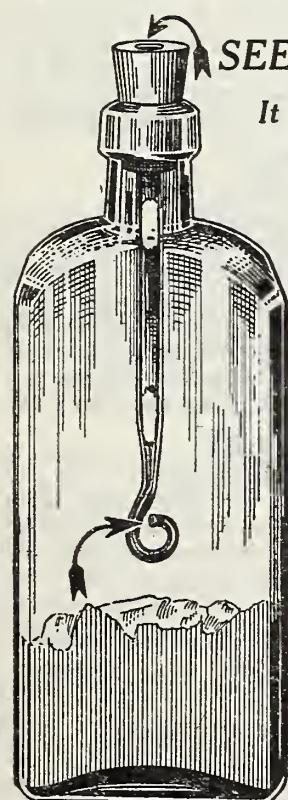
Easily applied—just sprinkle the seed  
before planting.

*An eminent authority states, "I would as soon think of preparing an alfalfa field without seed as to sow the seed without inoculation." (See Farmers' Bulletin No. 257 U. S. Dept of Agriculture.)*



Nitrogen gathering Nodules--Alfalfa

**ABSOLUTE PROOF** is the name of a booklet full of unsolicited endorsements from experimental stations, agricultural colleges and other high authorities. This booklet and full information on request.



## SEE THAT AIR TUBE?

*It Supplies Fresh Nitrogen  
Without which the cultures  
will not live.*

When put up in sealed bottles they soon lose their vitality, becoming inactive.

**FARMOGERM** is guaranteed to retain its original vitality for two years, and is the *only* preparation of its kind that is *not sealed*.

**LOOK FOR THE  
GLASS TUBE**  
*"It Keeps Them Alive."*

**FARMOGERM** is prepared for Alfalfa, all Clovers, Canada Field Peas, Cow Peas, Garden Peas and Beans, Soja Beans, Vetches and Sweet Peas.

**PRICES**—Postpaid—**Garden Size,  $\frac{1}{4}$  acre, 50c; 1 acre \$2.00; 5 acres \$6.00**  
**Special Sweet Pea, trial size 25c; Regular size 50c.**



When ordering be sure to state just what you want to inoculate

### North Carolina Experimental Station

"I am now, after being a doubting Thomas, ready to recommend the use of Farmogerm to the farmers for the inoculation of legume seed."

Prof. W. E. MASSEY, N. C. Exp. Sta.

### State College of Agriculture University of Georgia

"Where the seed was inoculated vetch grew 3 feet tall—a perfect stand; where not inoculated, they came up but soon died."

(Signed) LOY E. RAST,  
Instructor in Agronomy.

### Rhode Island Experiment Station.

Kingston, R. I.

Farmogerm furnished by you to Mr. Geo. S. Baker, of Providence, has given remarkable results. I have in my possession films and prints showing difference between inoculated and uninoculated areas—you will be pleased to see them.

(Signed) R. J. WHEELER,  
Director.



**"Diamond Quality"**

# GRASS SEEDS

Grass Seed Prices subject to change without notice. See note top of page 40.

## Special Pasture Mixtures

### No. 1. For Good Loamy Soil.

A mixture of Grasses and Clovers, prepared especially for good, loamy soils, that will give satisfaction as a permanent pasture, or for mowing for mixed hay. For pasture, sow 20 pounds per acre.

**Price, postpaid, 35c per lb. By freight or express, 10 lbs., 20c per lb.; 15 to 50 lbs., 19c per lb.; 100 lbs., \$18.00.**

### No. 3. For Light Sandy Soil.

An extra fine mixture for sandy or light soils. This will make a good, strong turf, that under ordinary circumstances, should last for many years. Sow 20 pounds per acre.

**Price, postpaid, 35c per lb. By freight or express, 10 lbs., 22c per lb.; 15 to 50 lbs., 20c per lb.; 100 lbs., \$19.00.**

**MIXTURES for BURNED-OVER LAND.**—In grading and cleaning grasses and clovers, we frequently find combinations that are difficult of separation, and while the seeds are often of excellent germination and quality they cannot profitably be separated and cleaned, so we blend them to produce pasture mixtures suitable for sowing on burns and logged-off land, which at the price are splendid values and very economical for such purposes.

### No. 4. For Dry Land.

Mixed especially for the regions between the Cascades and Rocky Mountains, and on good common wheat land. Try this mixture, as we believe that it will give you best possible results. Sow 20 pounds per acre.

**Price, postpaid, 35c per lb. By freight or express, 10 lbs., 20c per lb.; 15 to 50 lbs., 19c per lb.; 100 lbs., \$18.00.**

### No. 8. For Arid or Alkali Land.

Particularly for arid alkali lands. This mixture is composed of varieties that have proven to be the best for the soils mentioned. Sow 20 pounds per acre.

**Price, postpaid, 35c per lb. By freight or express, 10 lbs., 20c per lb.; 15 to 50 lbs., 19c per lb.; 100 lbs., \$18.50.**

**Price, 100 lbs., \$9.00.**

### Kentucky Blue Grass

(*Poa Pratensis*.)

One of the best grasses for permanent pasture, furnishing a constant supply of the most nutritious feed during the greater part of the year. Sow 28 pounds per acre.

**For Lawns.**—Blue Grass is used very extensively for lawns and is found in all lawn grass mixtures. Sow 1 lb., to 400 sq. feet if used alone.

**Fancy Per lb., postpaid, 25c; 100 lbs. \$14.00.**  
**DIAMOND FANCY. Per 100 lbs., \$17.00.**

### Canadian Blue Grass

(*Poa Compressa*.)

Recommended in all pasture mixtures on dry soil; thrives well on clay or hard trodden and poor soil. Sow 28 pounds per acre.

**Per lb., postpaid, 25c; 100 lbs., \$14.00.**

### English Rye Grass

(*Lolium Perenne*.)

A strong growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. Forty pounds per acre.

**For Lawns** this is used and recommended by many gardeners. If sown thickly it makes a fine lawn, and for large grounds and parks it is very successful.

**Per lb., postpaid, 25c; 100 lbs., \$11.50.**

### Crested Dogs Tail

(*Cynosurus Cristatus*.)

A perennial grass with short, narrow leaves; valuable for lawns or pastures on dry, light land; makes excellent sheep pasturage. Use 20 pounds per acre if sown alone.

**Per lb. postpaid, 50c; 10 lbs., \$4.00.**

### Bermuda Grass

(*Cynodon Dactylon*.)

Suitable only for climates where the Winters are not below the freezing point. It stands the hottest and driest season. Sow six pounds per acre.

**Per lb., postpaid, 75c; 10 lbs., \$6.50.**

### Tall Fescue

(*Festuca Elatior*.)

Succeeds best in moist alluvial and strong clayey soils; is very productive and lasting; valuable for permanent pasture, is relished by stock and on rich land makes fine hay — height 3 to 4 feet; 22 lbs. bu.

**Per lb., postpaid, 45c; 10 lbs., \$3.00.**

### Red or Creeping Fescue

(*Festuca Rubra*.)

Forms a close turf and is valuable for lawn and golf mixtures; thrives in sandy soils and along the Coast. (14 lbs. to the bushel.)

**Price per lb., postpaid, 40c; 10 lbs., \$3.00.**

### Creeping Bent Grass

(*Agrostis Stolonifera*.)

Well adapted for sandy pastures, near the Coast, and good for pasture on low lands. If sown alone, use 25 pounds per acre. Excellent for lawns. Use 12 to 15 pounds per 50-foot lot.

**Per lb. postpaid, 55c; 100 lbs., \$42.50.**

### Rhode Island Bent

(*Agrostis Canina*.)

Resembles Red Top. Makes a close sod: valuable for permanent pastures and meadows. Twenty-eight pounds per acre. For lawns, use 12 to 15 pounds per 50-foot lot. Gives good results.

**Per lb. postpaid, 50c; 100 lbs., \$40.00.**

### Italian Rye

(*Lolium Italicum*.)

A quick-growing grass, attaining a height of 2 1/2 to 4 feet; very desirable for temporary meadows or pastures (will last from two to six years). Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable. Sow 40 pounds per acre.

**Per lb. postpaid, 25c; 100 lbs., \$11.50.**

### Sweet Vernal

(*Anthoxanthum Odoratum*.)

Valuable to put in pasture mixtures and lawn grass on account of its earliness and its delightful fragrance when in bloom. Thrives under all growing conditions, but is only recommended for use in mixtures. If alone use 28 lbs. per acre.

**ANNUAL, per lb., postpaid, 35c., 100 lbs., \$25.00.**

**PERENNIAL, Per lb., postpaid, 65c; 100 lbs., \$50.00.**

### Wood Meadow Grass

(*Poa Nemoralis*.)

Thrives in shaded situations in woodland parks or lawns where other grasses would not grow. Is early, permanent, hardy, resists heat and cold and makes a good turf, and is good for pasture: 3 lbs. to acre; 19 lbs. to bu.

**Per lb., postpaid, 60c.**

## GRASS SEED—Continued

Grass Seed prices subject to change without notice. See page 40.

### Timothy

(*Phleum Pratense*.)

This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the Spring or Fall. Sow 15 to 20 pounds per acre.

Per lb., postpaid, 20c; 100 lbs., \$7.75.  
Dia. 100 lbs., \$8.75.

### Orchard Grass

(*Dactylis Glomerata*.)

One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. Sow 28 pounds per acre.

Per lb., postpaid, 30c; 100 lbs., \$19.00.

### Red Top

(*Agrostis Vulgaris*.)

A good perennial grass. Generally sown for permanent pastures. Does best on moist or even marshy land. If the ground is not overflow land it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsike Clover. Sow 28 pounds per acre chaff seed; 14 pounds hulled.

**CHOICE CHAFF.** Per lb., postpaid, 30c; 100 lbs., \$17.00.

**FANCY HULLED.**—A very superior grade of Red Top that is free from chaff and light seed.

Per lb., postpaid, 45c; 100 lbs., \$32.00.

### Meadow Fescue

(*Festuca Pratensis*.)

Perennial; grows three to four feet high. Roots deep, thus resisting drouth. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pastures, being valuable to mix with other kinds. Sown alone, use 40 lbs. per acre. Per lb., postpaid, 30c; 100 lbs., \$17.50.

### Bromus Inermis

(**Russian Forage Grass—Awnless Brome Grass**)

This Bromus, on account of its strong perennial character, and its unusual drouth-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. It grows luxuriantly, is freely eaten in either the dry or green state by cattle and yields enormously. It is a perennial and yields from 4 to 6 tons to the acre. Sow 25 to 30 pounds per acre, Spring or Fall.

Seed weighs 14 pounds per bushel.

Per lb., postpaid, 30c; 100 lbs., 17.00.

### Water Grass—Large

(*Paspalum Dilatatum Poir.*)

A coarse, leafy perennial 2 to 5 feet high; an excellent pasture grass of special value for late Summer and Fall. Thrives best on low, moist soils, but when well established endures prolonged drouth without injury. Sometimes called "Dallas grass."

Per lb., postpaid, 60c; 10 lbs., \$3.70.

### Water Meadow Grass

(*Poa Aquatica*)

An excellent pasture grass for wet situations, does well in bogs and marshes. 20 lbs to acre. 11 lbs. to bu.

Per lb., postpaid, 50c.

### Fine Leaved Fescue

(*Festuca Ovina Tenuifolia*)

Grows well on dry or poor soil and is much used for lawns. Plant 30 lbs. to the acre. (Bu. 14 lbs.)

Price per lb., postpaid, 65c.

### Tall Meadow Oat Grass

(*Avena Elatior*.)

Often attains a height of three to four feet by the middle of June. Makes splendid hay and thrives on sandy loam, but makes its best growth where there is some clay. Can be fed as a pasture grass, and will generally bear cutting three times. For mixing with Perennial Rye and Alfalfa for sandy soils it is excellent. Sow about 30 to 40 pounds per acre alone, or half that amount if mixed with the above varieties.

Per lb., postpaid, 35c; 100 lbs., \$22.00.

### Cheat Seed

(*Bromus Secalinus*)

Cheat yields a good crop of hay, especially on low or moist soil and will stand considerable overflow without harm. It makes an excellent hay for cows or horses, but should be cut before it gets too ripe. Sow in the Fall or early Spring same as oats and about 100 pounds per acre.

Per lb., postpaid, 15c; 100 lbs., \$2.75.

### Mesquite

(*Holcus Lanatus*)

It is usually sown on virgin soil, without cultivation, after the ground has been burned over. Sow about 35 pounds to the acre chaff seed; hulled 15 pounds per acre.

**FANCY HULLED Seed, per lb., postpaid, 30c; 100 lbs., \$16.00.**

**CHAFF SEED, Choice; per lb., postpaid, 20c; 100 lbs., \$9.50.**

### Hard Fescue

(*Festuca Duriuscula*)

Fine, rather dwarf, justly noted for its drouth resisting qualities. Valuable as a pasture for sheep. Sow 20 pounds per acre.

Per lb., postpaid, 40c; 10 lbs., \$2.50.

### Rough-stalked Meadow Grass

(*Poa Trivialis*)

A most valuable grass which flourishes in moist, rich soils. Roots are perennial, but soft; foliage freezes down.

Per lb., postpaid, 65c; 10 lbs., \$5.00.

### Sheep's Fescue

(*Festuca Ovina*)

Grows freely in high, dry and open pastures. Its chief merit is for sheep pasture. Thirty-five pounds to the acre.

Per lb., postpaid, 40c; 10 lbs., \$2.50.

### Water Fescue

(*Glyceria Fluitans*)

This grass grown naturally in and beside ditches pools, rivers and marshes. Sow 15 to 20 pounds per acre, Fall or Spring. Per lb., postpaid, 70c.

### Reed Canary Grass

(*Phalaris Arundinacea*)

**Will Grow on the Wettest Land You Have.**

A grass that will grow on stiff, wet land, even if the ground is overflowed for a month or six weeks. Makes a good hay if cut early in the season. Sow 10 pounds per acre.

Price,  $\frac{1}{4}$  lb., 35c; lb., 85c, postpaid.

**FOR SPECIAL MIXTURES: for BURNS, DRY or WET LANDS  
—Temporary or Permanent Plantings for Hay or Pasture — WRITE US**

**A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill BE SURE YOU GET A "CLIPPER." The mill with the "VERTICAL BLAST" Special Catalog and Full Information on Request.**



## REFERENCE TABLES

### Quantity of Seeds to produce a given number of plants and to sow an acre

Quantity per acre	Quantity per acre	Quantity per acre
Artichoke, 1 oz. to 500 plants. 6 oz.	Red Top, solid seed....10 to 15 lbs.	Vetches.....1 1/2 to 2 bu.
Asparagus, 1 oz. to 800 plants. 1 lb.	Timothy.....10 to 15 lbs.	With grain.....1 bu.
Asparagus Roots.....7500	Orchard, Perennial Rye. 1 to 2 bu.	Wheat.....1 1/2 to 2 bu.
Barley.....2 to 2 1/2 bu	Wood Meadow.....1 bu.	
Beans, dwarf, 1 lb. to 100 ft. of drill.....1 bu.	Horseradish Roots..15,000 to 25,000.	
Pole, 1 lb. to 100 hills.....1/2 bu.	Kale, 1 oz. to 2,000 plants.....4 oz.	
Beet, Garden, 1 oz. to 100 ft. drill.....6 to 7 lbs.	Kaffir Corn, in drills.....6 to 10 lbs.	
Mangel, 1 oz. to 100 ft. of drill.....5 lbs.	Kohl Rabi, 1 oz. to 2,000 plants. 4 oz.	
Broccoli, 1 oz. to 2,000 plants. 4 oz.	Leek, 1 oz. to 100 ft. of drill.....4 lbs.	
Brussels Sprouts, 1 oz. to 2,000 plants.....4 oz.	Lettuce, 1 oz. to 150 ft. drill..3 lbs.	
Broom Corn, in Drills.....15 lbs.	Millet—For Seed.....20 lbs.	
Buckwheat.....1/2 to 1 bu.	For Hay.....30 lbs.	
Cabbage, 1 oz. to 2,000 plants. 4 oz.	Melon, Musk, 2 oz. to 100 hills .....2 to 3 lbs.	
Carrot, 1/2 oz. to 100 ft. drill....3 lbs.	Water, 4 oz. to 100 hills..3 to 4 lbs.	
Cauliflower, 1 oz. to 3,000 plants.....3 to 4 oz.	Oats.....2 to 3 bu.	
Celery, 1 oz to 5,000 plants....4 oz.	Okra, 1 oz. to 100 ft. of drill..8 lbs.	
Cheat.....2 bu.	Onion Seed, for sets.....60 to 85 lbs. 1 oz. to 150 ft. drill.....3 to 4 lbs.	
Chicory.....4 lbs.	Onion Sets, 1 qt. to 40 ft. drill..8 bu.	
Clover, Alsike and White..8 to 10 lbs. Alfalfa.....15 to 20 lbs.	Parsnips, 1 oz. to 150 ft. drill..3 lbs.	
Crimson Trefoil....10 to 15 lbs.	Parsley, 1 oz. to 150 ft. drill..3 lbs.	
Red.....10 to 15 lbs.	Peas, Field.....2 bu.	
Collards, 1 oz. to 2,000 plants..4 oz.	Garden, 1 lb. to 100 ft. drill .....1 to 2 bu.	
Corn, Pop (shelled).....8 to 10 lbs. Sweet or Field, hills....12 to 15 lbs.	Pepper, 1 oz. to 1,000 plants..2 lbs.	
For soiling drills.....3 bu.	Pumpkin, 1/2 lb. to 100 hills .....3 to 5 lbs.	
Cress, 1/4 oz. to 100 ft. drill....1 lb.	Radish, 1 oz. to 100 ft. drill..10 lbs.	
Cucumber, 1 oz. to 100 hills.2 to 3 lbs.	Rape.....3 to 5 lbs.	
Egg Plant, 1 oz. to 2,000 plants. 4 oz.	Rye.....1 1/2 to 2 bu.	
Emmer.....100 lbs.	Salsify, 1 oz. to 100 ft. drill..6 to 8 lbs.	
Endive, 1/4 oz. to 100 ft. drill..4 lbs.	Spinach, 1 oz. to 100 ft. drill .....8 to 10 lbs.	
Flax, broadcast.....3/4 bu.	Sugar Cane, in drills.....10 lbs.	
Grass—Kentucky Blue, for pas- ture.....1 to 2 bu.	Sunflower.....8 lbs.	
Kentucky Blue for lawns..100 lbs.	Squash—Summer, 4 oz. to 100 hills.....3 lbs.	
Meadow Fescue.....1 bu.	Winter, 8 oz. to 100 hills...4 lbs.	
Mixed Lawn.....5 to 6 bu.	Tomato, 1 oz. to 2,000 plants..4 oz.	
Red Top, Chaff.....1 to 2 bu.	Tobacco, 1 oz. to 4,000 plants. 3 oz.	
	Turnip, 1 oz. to 150 ft. drill. 2 to 3 lbs.	

### WEIGHTS OF VARIOUS ARTICLES

Per bushel
Barley.....48 lbs.
Beans.....60 lbs.
Buckwheat.....48 lbs.
Blue Grass
Kentucky.....14 lbs.
English.....24 lbs.
Canary Seed.....60 lbs.
Cheat.....34 lbs.
Clover Seed.....60 lbs.
Corn, Shelled.....56 lbs.
Charcoal.....22 lbs.
Emmer.....40 lbs.
Flax Seed.....56 lbs.
Grass Seeds (unless otherwise stated) 14 lbs.
Hemp Seed.....44 lbs.
Hungarian Millet 48 lbs.
Lawn Grass.....20 lbs.
Meadow Fescue....24 lbs.
Millet.....50 lbs.
Oats.....32 lbs.
Onion Sets.....32 lbs.
Orchard Grass.....14 lbs.
Peach Pits.....48 lbs.
Peas, Smooth.....60 lbs.
Peas, Wrinkled....56 lbs.
Perennial Rye.....20 lbs.
Potatoes.....60 lbs.
Rape.....60 lbs.
Rye.....56 lbs.
Red Top.....14 lbs.
Red Top, Solid Seed 42 lbs.
Timothy.....45 lbs.
Vetches.....70 lbs.
Wheat.....60 lbs.

## "Diamond Quality" High Grade Fertilizers

It is established beyond question that different crops remove from the soil definite amounts of different Fertilizing elements and it is the aim in manufacturing our "Diamond Quality" Fertilizers to supply these elements in the proportion which the crops require. In mixing we use nothing but high-grade goods, and all potash used is the Sulphate form, thereby eliminating injurious Chlorine.

*We do not make a fertilizer for every crop, as many plants require nearly the same proportion of foods, and though we have named our "mixed fertilizers" after the most important crop for which they are used, they can also be applied equally as well to others, as recommended in our booklet "Fertilizers".*

## Every Land Owner

Should adopt a system under which his land improves and does not deteriorate even though he removes large crops each season. See pages 52-53.

*Ask for our Booklet "Fertilizers" and the free books of the German Kali Works.*

### English and German Names of Grains and Field Seeds.

ENGLISH	GERMAN	ENGLISH	GERMAN
Wheat	Weizen	Red Clover	Rother Klee
Oats	Hafer	White Clover	Weiszer Klee
Rye	Roggen	Alfalfa	Lucerne
Barley	Gerste	Timothy	Timotheus
Buckwheat	Buckweizen	Orchard Grass	Brautgras
Emmer	Emmer	Red Top Grass	Weisen fuchs schwanz
Cheat	Cheat	English Rye Grass	Englishes Raygras
Flax	Flachs	Italian Rye Grass	Italienisches Ray Gras
Lentils	Linse	Millet	Hirse
Vetch, or Tares	Wicke	Blue Grass	Blaugras
Speltz	Spelz		

 A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill BE SURE YOU GET A "CLIPPER," the only fanning mill with the "VERTICAL BLAST." WRITE FOR SPECIAL CATALOG.

## Foreign Names of Vegetables, Grains and Fruits

*This List includes only those varieties that are in general cultivation.*

ENGLISH	FRENCH	GERMAN	ITALIAN
Artichoke	Artichaud	Artischoke	Carciofo
Asparagus	Asperge	Spargel	Asparago or Sparagio
Beans, dwarf	Haricot, Nain	Bohnen	Fagiulo
Beans, pole	Haricot a'Rames	Stangen Bohnen	Frihol
Beet	Betterave or Bette Rouge	Rothe Ruebe	Barbabietola
Borecole or Kale. See Kale.			
Broccoli	Brocoli	Spargelkohl	Broccolo
Brussels Sprouts	Chou Verts	Rosenkohl	Cavolo di Bruxelles
Cabbage	Chou Pomme	Kopf Kohl or Kraut	Cavolo
Cabbage Savoy	Chou de Milan	Wirsing	Cavolo Cappacio
Cauliflower	Chou-fleur	Blumenkohl	Cavolfiore
Carrot	Carotte	Gelbe Rübe or Mohre	Carota
Celery	Celeri Mavet	Sellerie	Sedano or Appio
Celeriac	Celeri-rave	Knoll-Sellerie	Appio Marone
Chervil	Cerfeuil	Kerbel	Cerfoglio
Chicory	Chicorice Sauvage	Gemeine Cichorie	Cicoria
Corn, Maize	Mais	Mais	Mais.
Corn Salad	Mache	Feldsalat	Valeriana Domestica
Collards	Chow Coba	Blatterkohl	
Cress, Curled	Cresson Alenois	Garden-Kresse	Crescione
Cress, Water	Cresson de Fontaine	Brünnenkresse	Crescione di Sorgente
Cucumber	Conconbre	Gurke	Citriuolo
Egg Plant	Aubergine or Melongerce	Eierpflanze	Melanzana
Endive, Curled	Chicoree	Endivie	Indivia
Endive, Batavian	Escarolle	Blat-endive	Escarolle
Garlic	Ail	Knoblauch	Aglio
Horseradish	Raifort	Meerrettig	Ramolaceio
Kale	Chou Frise	Blätter or Grünen Kohl	Cavolo Riccio
Kohl Rabi	Chou-rave	Kohl Rabi	Cavolo Rapi
Leek	Poireau	Gemeiner Lauch	Porro
Lettuce	Laitue	Lattich or Garten-salat	Lattuga
Melon, Musk	Melon Musque	Zucker-Melone	Mellone or Popone
Melon, Water	Melon d'eau	Wasser-melone	Cocomero or Anguria
Mushroom	Champignon	Essbare Blatter-schwamme	Pratajulo bianco, Fungo
Mustard	Moutarde	Senf	Senapa or Mortarda
Okra or Gumbo	Gombaud	Okra	Ocra
Onion	Ognon	Zwiebel	Cipolla
Oyster Plant, see Salsify			
Parsley	Persil	Petersilie	Petrosemolo
Parsnip	Panaïs	Pastinake	Pastinaca
Pea	Pois	Erbse	Pisello
Pepper	Poivre	Pfeffer	Pepe
Potato	Pomme de Terre	Kartoffle	Patata
Pumpkin	Citronille or Potiron	Melonen Kürbis	Zucca
Radish	Rave	Rettig	Ravanello or Radis
Rape	Navette	Repskohl	Rapa Selvatica
Rhubarb	Rhubarbe	Rhabarber	Rabarbaro
Salsify or Oyster Plant	Salsifis	Haferwurzel or Bocksbart	Sassifica
Spinach	Epinards	Spinat	Spinacio
Squash	Courge	Speisie Kürbiss	Zucca
Tomato	Tomate	Liebesapfel	Pomidoro
Turnip	Navet	Rübe	Rapa or Navone
FRUITS			
Almond	Amande	Mandel	Mandorla
Apple	Pomme	Apfel	Mela or Pomo
Apricot	Abricot	Apricose	Albicocca
Cherry	Cerise	Kirsche	Ciriegia
Currant	Groseille	Johannisbeere	Ribes
Fig	Figue	Fege	Fico
Filbert	Noisette	Nussbaum	Avellana or Noccinola
Gooseberry	Groseillier a Maquereau	Stachelbeere	Uva-Spina
Grape	Vigne	Traube	Uva
Lemon	Limon	Limonie	Limone
Mulberry	Mure	Maulbeere	Mora
Nectarine	Brugnon	Nectarpfirsch	Pesche Noci or Nettarine
Olive	Olivie	Oelbaum or Olive	Uliva
Orange	Orange	Pomeranze	Arancia
Peach	Peché	Pflirsiche	Pesca
Pear	Poire	Birne	Pera
Plum and Prune	Prune	Pflaume	Susina or Prugna
Pomegranate	Grenade	Granatenbaum	Melagrana
Quince	Coing	Quitte	Melacatogna
Strawberry	Fraise	Erdbeere	Fragola
Blackberry	Murier de Renard	Brombeere	Moro di Rovo
Raspberry	Framboise	Himbeere	Lampone



# Diamond Fertilizers

**The Base is Bone Meal and Tankage—No Cheap Filler. Every Pound is Good Fertilizer**



**DIAMOND QUALITY Fertilizers** are complete fertilizers of the highest grade and concentration, no inferior ingredients or cheap fillers are used in their preparation. Bone Meal and Tankage forming the base to which is added the necessary Potash, Nitrogen and Phosphoric Acid. Each package is marked plainly, showing the percentage of available plant food.

**SPECIAL FERTILIZER BOOKLET** giving complete details and prices of the different fertilizers which we can supply, together with full information for their application, will be sent on request. This booklet is instructive, reliable and of great value to all interested in fertilizers.

**Applied in quantities of 1000 lbs. to a ton per acre**, our fertilizers, with intelligent culture will sustain and gradually improve the soil and increase the yield and quality of the product, even though the crop be entirely removed and no other manuring done. The roots, vines, stubble and whatever of weeds or waste there is, all assist in providing the necessary humus. A greater amount is often used to advantage by market gardeners. Complete instructions will be found in our Fertilizer Booklet, sent free. If there is any special information you require, write us; your inquiries will have our prompt and careful attention and our experience may help you.

Being the largest dealers, we carry the most complete stock of fertilizers and fertilizing materials in the Northwest, and having installed modern machinery for regrinding and mixing our "Diamond Quality" Fertilizers, we can make immediate delivery in any quantity, ground to a fineness and blended to a mechanical perfection that make them of superior excellence. Fertilizers that are machine mixed and fined are more thoroughly and evenly blended, are more readily available and give uniformly better results than when mixed by hand.

## No. 1—General Fertilizer

An all-round fertilizer, which can be used on any crop, but is especially adapted for grain and general farm crops. Analysis: Nitrogen, 2 to 3 per cent; phosphoric acid, 7 to 8 per cent; potash, 6 per cent. **Price: 10 lbs., 40c; 100 lbs., \$2.00; per ton, \$38.00**

## No. 4—Fruit and Strawberry

This fertilizer is also used for blackberries, raspberries, etc. We sell large quantities for growing the famous Hood River strawberries. Analysis: Nitrogen, 2 1/2 to 3 per cent; phosphoric acid, 7 to 8 1/2 per cent; potash, 10 per cent. **Price: 10 lbs., 40c; 100 lbs., \$2.10; ton, \$40.00.**

## No. 5—Odorless Lawn Dressing

Our No. 5 Diamond Lawn Fertilizer promotes a vigorous healthy growth giving the desired dark rich green appearance, can be used at the time the seed is planted and later as a top dressing. One hundred pounds is sufficient for an ordinary city lot, and is far more effective and less objectionable than stable manure. Remember, it contains no weed seeds. When used as a top dressing it is best to make several light applications about two weeks apart. **Price: 10 lbs., 50c; 25 lbs., 75c; 50-lb. sack, \$1.25; 100 lbs., \$2.25.**

## No. 10—Special Hop and Onion

A fertilizer made especially for hops and onions; very rich in potash, and when used freely has been known to double the yield and improve the quality. Be sure that you get "Diamond Brand." Analysis: Nitrogen, 2 1/2 to 3 1/2 per cent; phosphoric acid, 8 to 10 per cent; potash, 12 per cent. **Price: 100 lbs., \$2.10; 500 lbs., \$10.25; ton, \$40.00.**

## Nitrate of Soda

For immediate results Nitrate of Soda is the very best for stimulating and forcing the growth of plants or any other crop.

**Market unsettled—Prices on request.**

## Comparative Values

A 100-pound bag of high grade commercial fertilizer will contain more soluble and available plant food than 4,000 pounds (two tons) of stable manure of average quality. How much easier and cleaner to handle one 100-pound bag than 2 tons of manure, and there are no weed seeds to worry over.



**AS FERTILIZERS ARE SOLD ON A SMALL MARGIN, PRICES ARE SUBJECT TO MARKET CHANGES, but you will always get FULL VALUE for your money**

## Land Plaster, or Gypsum

Made from pure gypsum, free from clay or other foreign matter. This is especially valuable for clover crops.

**10 lbs., 25c; 100-lb. sack, 75c; ton, \$12.00.**

## Lime Rock—Fine Ground

This is the form of lime recommended by the Agricultural Dept. Use 1/2 to 1 ton per acre.

**Price: 100 lbs., 70c; ton \$10.50.**

## Superphosphate

This is a concentrated form of phosphoric acid, and it is actually the cheapest form in which to buy phosphoric acid. Our present stock contains 17 to 18 per cent available phosphoric acid.

**Price: per lb., 5c; 100 lbs., \$1.40; ton \$26.00.**

## Bone Meal

Fine ground, is one of the best fertilizers. This is the only grade of Bone Meal, and is reduced by improved machinery to an even fineness—nothing is added. This is a very valuable enricher of the soil, and one of the most economical at present prices.

**Price: 5 lbs., 25c; 10 lbs., 35c; 100 lbs., \$2.15; ton, \$40.00.**

## Blood Meal

Blood, cooked, dried and finely ground, a quick-acting fertilizer, analyzing very rich in effective nitrogen; in fact, the nitrogen of Dried Blood is one of the most effective forms of organic nitrogen known. This also carries some phosphorous; is a strong fertilizer, a little going a long way.

**Price: 5 lbs., 30c; 10 lbs., 50c; 100-lb. sack, \$3.75.**

## Tankage

Ground meat scraps and bone, dessicated in a vacuum, is very rich in phosphoric acid and nitrogen.

**Price: per 100-lb. sack, \$2.00; \$35.00 per ton.**

## Fish Guano

Fish scraps, cooked, dried and ground, is a strong fertilizer, rich in nitrogen, carrying considerable phosphorus and used largely by vegetable growers. We do not recommend this for lawns or city use, as odor is objectionable.

**Price: 100 lbs., \$2.75; ton, \$50.00.**

## FERTILIZERS—Continued

# POTASH

### One of the Most Important Fertilizing Elements

**POTASH** is found in large proportions in all plants. It is essential to the production of starch, fiber and the growing parts of the plant; without it there cannot be full development of plant or seed. In combination with Nitrogen and Phosphoric Acid, Potash contributes to the full and perfect development of plants.

Being selling agents for the **GERMAN KALI WORKS**, whose products are known and used throughout the entire world, we receive direct importations and offer the following in original packages, (Sealed Bags 224 lbs. each) or can supply any quantity, large or small, at lowest price.

**MURIATE OF POTASH** contains a larger percentage of actual Potash than other commercial forms and is, therefore, cheaper where it can be safely used, but owing to the Chlorine contained, is not best for some crops unless applied a few months previous to planting, which allows the Chlorine to leach out while all of the actual Potash is retained until taken up by the plants.

**SULPHATE OF POTASH** contains no Chlorine, can be used on any crop requiring Potash and is especially adapted for mixtures, being in the form of a dry powder. It is also the best form of Potash for heavy soils and is always used in our "Diamond Mixed" Fertilizers.

**KAINIT** is another potash salt containing chlorine, and is especially valuable for use on sandy soils, not only for its fertilizing qualities, but also for its peculiar property of retaining moisture, and its power of destroying insect life and preventing plant diseases.



## Prices on Potash

—quoted on request. Germany supplies the world and war affects the supply and prices.

The valuable literature of the German Kali Works will be sent **FREE** on application. If you are not informed on the subjects treated it will pay you to give this your immediate attention.

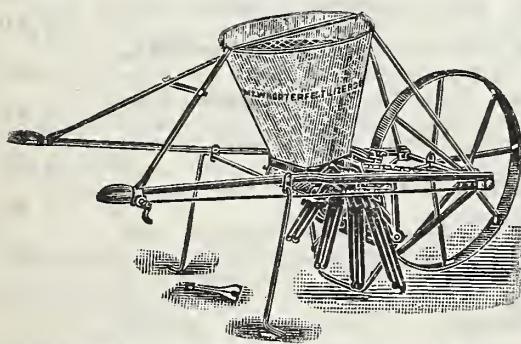
Our fertilizers contain generous supplies of vital plant food. Being highly concentrated and readily available, small quantities only are needed for the production of the finest crops. **THEY ARE QUICK IN ACTION, RELIABLE AND ECONOMICAL.**

## DIAMOND PLANT FOOD

For Ferns, Palms and House Plants. Clean, Odorless, Highly Concentrated

A complete, highly concentrated, powerful fertilizer, clean and odorless, wonderfully invigorating to all plants; producing luxuriant foliage and larger and more brilliant flowers. A 25c package will feed a dozen large plants a whole year. Special instructions on each package.

Price:  $\frac{1}{2}$  lb. pkg., 15c, by Mail, 25c; 1 lb. pkg., 25c; by mail, 40c.



McWHORTER'S FERTILIZER DRILL

## McWhorter Fertilizer Drill No. 21

For the Practical, Superior Distribution of Commercial Fertilizers — Simple in Construction, Easily Understood and Effective in Operation.

This machine needs no defense or praise from us. Wherever known, it is pronounced the best. Has a force feed without friction; does not require that degree of dryness in the fertilizer necessary to all other distributors we have seen; is so arranged that the fertilizer can be applied in any manner that may be desired, as the operator has perfect control of the spread and division of same, any change for that purpose requiring only a few seconds.

It will distribute the fertilizer in one or more furrows beside the growing crop or broadcast to any extent up to a uniform spread of over two feet, without removing or adding any part or loosening a bolt, and in any quantity from a few pounds up to forty or more pounds to the hundred yards of row, or from 200 pounds to over a ton to the acre. We call special attention to this ability to **SPREAD** the fertilizer with this machine. It is a highly important feature and will be appreciated by the thinking farmer. A decidedly wrong thing is to apply the strong fertilizers of the present day without sufficiently spreading and incorporating them with the soil. **Shipping weight, 61 pounds.**

Price, complete, \$13.00.

**FARMOGERM** is a practical success. A \$2.00 package used on a leguminous crop will produce as much nitrogen as 8 tons of manure. See Page 47



# BOOKS

Standard text and reference works by recognized authorities.  
Special orders for books not listed will have prompt attention.

Books are the inspiration, the authoritative guide, that enables you to command success, and you should have the standard references on the subjects in which you are interested.

All books postpaid at following prices	Binding Price	Note: C indicates cloth; P, paper cover	Binding Price
<b>Agriculture, The Principles of,</b> Bailey, 336 pages, 5x7 1/2 in.	C \$1.45	<b>Gardening for Pleasure,</b> Henderson, 404 pages, 5x7 1/2 in.	C 1.65
<b>Alfalfa, The Book of,</b> Coburn, 324 pages, 6x9 in.	C 2.20	<b>Gardening for Profit,</b> Henderson, 376 pages, 5x7 1/2 in.	C 1.65
<b>Alfalfa, Practical Information on,</b> Coburn, 161 pages, 5x7 1/2 in.	C .60	<b>Gardening for Young and Old,</b> Harris, 191 pages, 5x7 1/2 in.	C 1.10
<b>Alfalfa Farming in America,</b> Wing, 480 pages, 5x8 in.	C 2.20	<b>Garden Making,</b> Bailey, 417 pages, 5x7 1/2 in.	C 1.70
<b>Apple Culture, Field Notes on,</b> Bailey, 88 pages, 5x7 1/2 in.	C .85	<b>Ginseng,</b> Kains, 144 pages, 5x7 1/2 in.	C .60
<b>Apple Orchard, The American,</b> Waugh, 214 pages, 5x7 1/2 in.	C 1.15	<b>Goats, Money in,</b> by W. S. Bull, 24 pages, 5 1/2 x 8 1/2 in.	P .25
<b>Asparagus,</b> Hexamer, 166 pages, 5x7 1/2 in.	C .55	<b>Grape Culturist, The,</b> Fuller, 282 pages 5x7 1/2 in.	C 1.60
<b>Basket Making With Raffia,</b> Morse, 30 pages, 5x7 in.	P .25	<b>Grasses and How to Grow Them,</b> Shaw, 453 pages, 5x7 1/2 in.	C 1.60
<b>Beautiful Flower Garden, The,</b> Matthews, 186 pages, 5x7 1/2 in.	P .50	<b>Grasses and Forage Plants,</b> Flint, 398 pages, 5 1/2x8 in.	C 2.50
<b>Blackberry and Raspberry Culture,</b> Littooy, 48 pages, 3 1/2x6 in., new edition.	P .40	<b>Greenhouse Construction,</b> Taft, 210 pages, 5x7 1/2 in.	C 1.60
<b>Bulbs and Tuberous-Rooted Plants,</b> Allen, 312 pages, 5x7 in.	C 1.70	<b>Greenhouse Management,</b> Taft, 382 pages, 5x7 1/2 in.	C 1.65
<b>Bush Fruits,</b> Card, 537 pages, 5x7 1/2 in.	C 1.70	<b>Hedges, Windbreaks, Etc.,</b> Powell, 140 pages, 5x7 1/2 in.	C .60
<b>Cabbages and Cauliflowers, Broccoli, etc.,</b> Gregory, 93 pages, 5x7 1/2 in.	P .40	<b>Home Floriculture,</b> 300 pages, 5x7 in.	C 1.10
<b>Cabbages and Cauliflower, Etc,</b> Allen, 125 pages, 5x7 in.	C .60	<b>Homes for Home-Builders,</b> King, 251 pages, 5x7 1/2 in.	C 1.10
<b>Carnation Culture, American,</b> Lamborn, 175 pages, 5x8 1/2 in.	C 2.00	<b>How to Choose a Farm,</b> Hunt, 412 pages, 5 1/2x7 1/2 in.	C 2.00
<b>Celery Culture,</b> Beattie, 143 pages, 5x7 1/2 in.	C .55	<b>How to Plan the Home Grounds,</b> Parsons, 249 pages, 5x8 in.	C 1.10
<b>Chrysanthemum, The,</b> Herrington, 160 pages, 5x8 in.	C .60	<b>Injurious Insects of the Farm and Garden,</b> Treat, 296 pages, 5x7 1/2 in.	C 1.60
<b>Clovers and How to Grow Them,</b> Shaw, 349 pages, 5x7 1/2 in.	C 1.10	<b>Insects Injurious to Fruits,</b> Saunders, 436 pages, 5x8 in.	C 2.25
<b>Corn, Study of,</b> Shoesmith, 100 pages, 5x7	C .60	<b>Insects and Insecticides,</b> Weed, 334 pages, 5x7 1/2 in.	C 1.60
<b>Corn Crops, The,</b> A discussion of maize, Kaffirs and Sorghums, Montgomery 347 pages, 5x 7 1/2 in.	C 1.70	<b>Irrigation for the Farm, Garden and Orchard,</b> Stewart, 276 pages, 5x7 1/2 in.	C 1.10
<b>Cranberry Culture,</b> White, 131 pages, 5x7 1/2 in.	C 1.70	<b>Land Draining,</b> Miles, 199 pages, 5x7 1/2 in.	C 1.10
<b>Daffodils-Narcissus,</b> Kirby, 235 pages, 5x7 1/2 in.	C 1.10	<b>Landscape Beautiful, The,</b> Waugh, 336 pages, 6x8 1/2 in.	C 2.15
<b>Draining for Profit and Health, War-Dry Farming,</b> Widdsone, 252 pages, 5x7 1/2 in.	C 1.70	<b>Landscape Gardening,</b> Maynard, 338 pages, 5x7 1/2 in.	C 1.60
<b>Dwarf Fruit Trees,</b> Waugh, 125 pages, 5x7 1/2 in.	C 1.10	<b>Landscape Gardening,</b> Waugh, 152 pages, 5x7 1/2 in., New edition.	C .85
<b>Farm Appliances,</b> Martin, 192 pages, 5x7 in.	C .60	<b>Lawns and How to Make Them,</b> Barron, 174 pages, 5x7 1/2 in.	C 1.10
<b>Farm Book, New American,</b> Allen, 540 pages, 5x7 1/2 in.	C 2.25	<b>Manures, How to Make and How to Use Them,</b> Sempers, 218 pages, 5x7 1/2 in.	P .50
<b>Farmstead, The,</b> Roberts, 350 pages, 5x7 1/2 in.	C 1.70	<b>Manure, The Bommier Method of Making,</b> 86 pages, 6x9 in.	P .30
<b>Farm Conveniences,</b> 256 pages, 5x7 1/2 in.	C 1.10	<b>Market Gardening and Farm Notes,</b> Landreth, 215 pages, 5x7 1/2 in.	C 1.10
<b>Farm Gardening and Seed Growing,</b> Brill, 166 pages, 5x7 1/2 in.	C 1.10	<b>Money in the Garden,</b> Quinn, 268 pages, 5x7 1/2 in.	C 1.10
<b>Farm Grasses of the United States,</b> Spillman, 248 pages, 5x7 1/2 in.	C 1.10	<b>Mushroom Culture and Pure Culture, Spawn,</b> 33 pages, 5x8 in.	P .35
<b>Farm Stock,</b> Burkett, 358 pages 5x8 in.	C 1.65	<b>Mushrooms, How to Grow Them,</b> Falconer, 169 pages, 5x7 1/2 in.	C 1.10
<b>Ferns, and How to Grow Them,</b> Woolson, 156 pages, 5x7 1/2 in.	C 1.10	<b>Nursery Book, The,</b> Bailey, 365 pages, 5x7 1/2 in.	C 1.65
<b>Fertilizers,</b> Gregory, 137 pages, 5 1/2x7 1/2 in.	C .50	<b>Nut Culturist, The,</b> Fuller, 289 pages, 5x7 1/2 in.	C 1.60
<b>Fertilizers,</b> Voorhees, 335 pages, 5x8 in.	C 1.40	<b>Onion Book, The, Prize Essays and Other Papers,</b> 36 pages, 7x10 in.	P .30
<b>First Book of Farming, The,</b> Goodrich, 259 pages, 5x7 1/2 in.	C 1.10	<b>Onion Culture, New,</b> Greiner, 115 pages, 5x7 1/2 in.	C .60
<b>First Principles of Soil Fertility,</b> Vivian, 265 pages, 5x7 1/2 in.	C 1.10	<b>Peach Culture,</b> Fulton, 204 pages, 5x7 1/2 in.	C 1.10
<b>Floriculture, Practical,</b> Henderson, 325 pages, 5x7 1/2 in.	C 1.60	<b>Play and Profit in My Garden,</b> Roe, 349 pages, 5x7 1/2 in.	C 1.15
<b>Flower Garden, The,</b> Ida D. Bennett, 282 pages, 5x7 1/2 in.	C 1.60	<b>Potato Culture, A B C of,</b> Terry, 318 pages, 4 1/2x6 in.	P .50
<b>Forestry, Practical,</b> Fuller, 299 pages.	C 1.65	<b>Potato, The,</b> Frazer, 185 pages, 5x7 1/2 in.	C .85
<b>Fruit Garden, Barry's,</b> 516 pages, 5x7 1/2 in.	C 1.65	<b>Propagation, Art of,</b> Jenkins, 115 pages, 5x7 1/2 in.	P .30
<b>Fruit Grower, The Practical,</b> Maynard, 128 pages, 5x7 in.	C .60	<b>Propagation of Plants,</b> Fuller, 349 pages, 5x7 1/2 in.	C 1.60
<b>Fruit Growing, The Principles of,</b> Bailey, 516 pages, 5x7 1/2 in.	C 1.65	<b>Pruning Book, The,</b> Bailey, 545 pages, 5x7 1/2 in.	C 1.65
<b>Forcing Book, The,</b> Bailey, 266 pages, 5x8 in.	C 1.45	<b>Rhubarb Culture, The New Morse,</b> 130 pages, 5x7 1/2 in.	C .50
<b>Fruit Harvesting, Storing, Marketing,</b> Waugh, 224 pages, 5x7 1/2 in.	C 1.10	<b>Rose, The Book of the,</b> Foster-Melliar, 356 pages, 5x7 1/2 in.	C 2.15
<b>Fungi and Fungicides,</b> Weed, 228 pages, 5x7 1/2 in.	C 1.10		

## NEW BOOKS—Continued

Note—C indicates cloth; P, paper cover.

Binding Price.

**THE ROSE BOOK**, By H. H. Thomas and  
Walter Easle.

A complete guide for amateur rosegrowers, is the latest, most beautiful and complete work that the English have given us; 64 beautiful half-tone engravings, 8 pages of superb color plates; if you love roses, you should have this book—**An ideal gift book**—278 pages,  $5\frac{1}{2} \times 8\frac{1}{4}$ , \$2.15, postpaid.

<b>Rhubarb Culture, The</b> New Morse,	
130 pages, $5 \times 7 \frac{1}{2}$ in.	.50
<b>Rose, The Book of The</b> , Foster-Melliar,	
356 pages, $5 \times 7 \frac{1}{2}$ in.	2.15
<b>Roses and How to Grow Them</b> , 189 pages, $5 \times 7 \frac{1}{2}$ in.	1.10
<b>Rose Growing, Practical and Pictorial</b> , Wright.	.75
<b>Roses and Rose Growing</b> , Kingsley,	
163 pages, $6 \times 9$ in.	2.10
<b>Silos, Ensilage and Silage</b> , Miles, 100 pages, $5 \times 7 \frac{1}{2}$ in.	.60
<b>Small Fruit Culturist</b> , Fuller, 298 pages, $5 \times 7 \frac{1}{2}$ in.	1.10
<b>Soiling Crops and the Silo</b> , Shaw, 466 pages, $5 \times 7 \frac{1}{2}$ in.	1.60

<b>New A B C and X Y Z of Bee Culture</b>	
<b>Price C English Edition, postpaid</b>	\$.215
<b>C German Edition, postpaid</b>	2.75
<b>P German Edition, postpaid</b>	2.25
<b>C French Edition, postpaid</b>	2.25
<b>C Spanish Edition, postpaid</b>	2.25

By freight or express, deduct 15c from prices.

**Advanced Bee Culture**, Hutchinson, 201 pages,  $6 \times 9 \frac{1}{2}$  in.

<b>American Standard of Perfection</b> , 331 pages, $5 \frac{1}{2} \times 8$ in.	C \$2.00
<b>Artificial Incubating and Brooding</b> , 96 pages, $9 \times 11 \frac{1}{2}$ in.	P .50
<b>Asiatics, The</b> , 96 pages, $9 \times 11 \frac{1}{2}$ in.	P .50
<b>Bantam Fowl, The</b> , McGrew, 68 pages, $9 \times 11 \frac{1}{2}$ in.	P .50
<b>Beginner in Poultry, The</b> , Valentine 450 pages.	C 1.60
<b>Capons for Profit</b> , Greiner, 64 pages, $7 \frac{1}{2} \times 10$ in.	P .50
<b>Chick Book, The</b> , 80 pages, $9 \times 11 \frac{1}{2}$ in.	P .50
<b>Duck Culture</b> , Rankin new edition.	.75
<b>Ducks and Geese</b> , 104 pages, $9 \times 11 \frac{1}{2}$ in.	P .75
<b>Egg Farm, The New</b> , Stoddard, 332 pages, $5 \times 7 \frac{1}{2}$ in.	C 1.10
<b>Eggs and Egg Farms</b> , 96 pages, $9 \times 11 \frac{1}{2}$ in.	P .50
<b>Egg Record and Account Book</b>	.25
<b>First Lessons in Poultry Keeping</b> , Robinson, 168 pages, $6 \times 9$ in.	P .50
<b>Five Hundred Questions and Answers</b> , Darrow, 48 pages, $6 \times 9$ in.	P .25
<b>Incubating and Brooding, Artificial</b> , 96 pages, $9 \times 11 \frac{1}{2}$ in.	P .50
<b>Leghorns, The, All Varieties</b> , New Edition, $9 \times 11 \frac{1}{2}$ in.	P 1.00

## Dairy and Stock Books

<b>American Cattle Doctor</b> , Dadd, 367 pages.	C \$2.10
<b>Barn Plans and Out Buildings</b> , 385 pages, $5 \times 7 \frac{1}{2}$ .	C 1.10
<b>Dairying, The Business of</b> , Lane, 234 pages, $5 \times 7 \frac{1}{2}$ .	C 1.35
<b>Dairy Chemistry</b> , Snyder, 190 pages, $5 \times 7 \frac{1}{2}$ .	C 1.25
<b>Dairying, Profitable</b> , Peck, 174 pages, $5 \times 7 \frac{1}{2}$ .	C .85
<b>Farmers Veterinarian</b> , Burkett, 288 pages, $5 \times 7$ .	C 1.65
<b>Farm and Dairy</b> , Sheldon, 158 pages, $5 \times 7 \frac{1}{2}$ .	C 1.10
<b>Feeding and Management of Live Feeds and Feeding</b> , Henry Stock, Shaw, 99 pages, $5 \frac{1}{2} \times 8 \frac{1}{2}$ .	C 2.35
<b>Forage Crops</b> , Voorhees, 384 pages, $5 \frac{1}{2} \times 7 \frac{1}{2}$ .	C 1.10
	C 1.65

All books postpaid at following prices:

Binding Price

<b>Spraying Crops</b> , Weed, 136 pages, $5 \times 7 \frac{1}{2}$ in.	C .60
<b>Strawberry Culture, The A B C of</b> , Terry & Root, 235 pages, $5 \times 6$ in.	P .50
<b>Strawberry Culturist, The Illustrated</b> , Fuller, 59 pages, $5 \times 7$ in.	C .35
<b>Sweet Potato Culture</b> , Fitz, 86 pages, $5 \times 7 \frac{1}{2}$ in.	C .55
<b>Ten Acres Enough</b> , 273 pages, $5 \times 7 \frac{1}{2}$ in.	C 1.10
<b>Tomato Culture</b> , Littooy, 24 pages, $5 \times 7 \frac{1}{2}$ in.	P .25
<b>Tomato Culture</b> , Tracy, 150 pages, $5 \times 7 \frac{1}{2}$ in.	C .50
<b>Vegetable Gardening, Principles of</b> , Bailey, 458 pages, $5 \times 7 \frac{1}{2}$ in.	C 1.60
<b>Vegetable Gardening</b> , Green, 252 pages, $5 \times 7 \frac{1}{2}$ in.	C 1.10
<b>Violet Culture, Commercial</b> , Gallo-way, 239 pages, $5 \times 7$ in.	C 1.50
<b>Violets, How to Make Money Growing</b> , Saltford, 45 pages, $6 \times 6 \frac{1}{2}$ in.	P .30
<b>Water Lilies and How to Grow Them</b> , Conard & Hus, 228 pages, $5 \times 7 \frac{1}{2}$ in.	C 1.10
<b>Weeds, A Manual of</b> , Georgia, $5 \times 7 \frac{1}{2}$ in.	C 2.10
<b>Window Flower Garden, The</b> , Heinrich, 123 pages, $5 \times 7 \frac{1}{2}$ in.	C .60

## Bee

<b>Bee Keeper's Guide, The</b> , Cook, 343 pages, $5 \frac{1}{2} \times 8$ in.	C 1.35
<b>Fifty Years Among the Bees</b> , Miller, 343 pages, $5 \times 8$ in.	C 1.10
<b>How to Keep Bees</b> , Comstock, 228 pages, $5 \times 7 \frac{1}{2}$ in.	C 1.10
<b>How to Produce Extracted Honey</b> , Root, 29 pages, $4 \times 6$ in.	P .20
<b>Modern Queen Rearing</b> , Root, 33 pages, $4 \times 6$ in.	P .20

## Poultry and Pigeon

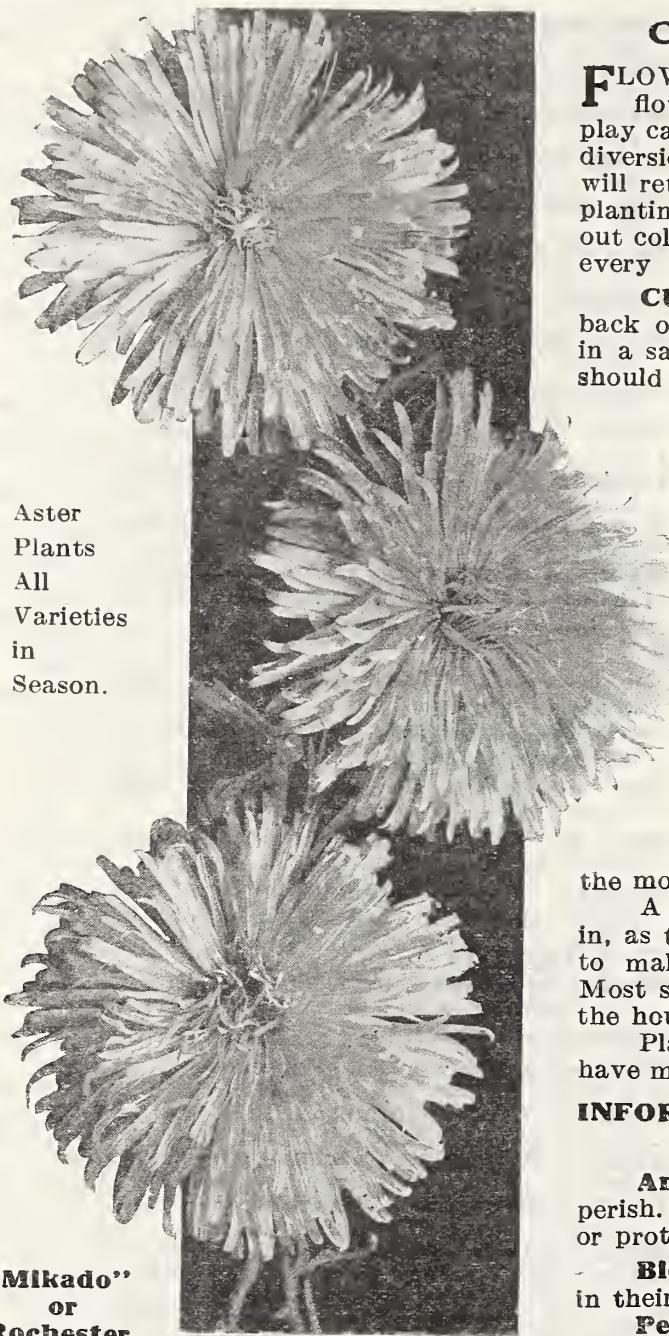
<b>Money in Broilers and Squabs</b> , Boyer, 148 pages, $6 \times 9$ in.	P .50
<b>Orpington, The</b>	P .75
<b>Plymouth Rocks, All Varieties</b> , New Edition.	P 1.00
<b>Poultry Craft</b> , Robinson, 271 pages, $6 \times 9 \frac{1}{2}$ in.	C 1.50
<b>Poultry Houses and Fixtures</b> , 95 pages, $9 \times 11 \frac{1}{2}$ in.	P .50
<b>Poultry Remedies, Reliable</b> , 93 pages, $5 \frac{1}{2} \times 8 \frac{1}{2}$ in.	P .25
<b>Rhode Island Reds</b>	P .75
<b>Successful Poultry Keeping</b> , 176 pages, $9 \times 11 \frac{1}{4}$ in.	P 1.00
<b>Two Hundred Eggs a Year Per Hen and How to Get Them</b> , Warren, 96 pages, $6 \times 9$ in.	P .50
<b>Turkeys, All Varieties</b> , 80 pages, $9 \times 11 \frac{1}{2}$ in.	P .75
<b>Wyandottes, All Varieties</b> , New Edition.	P 1.00
<b>Pigeon Book, The Feather's Practical</b> , Long, 168 pages, $5 \times 7 \frac{1}{2}$ in.	P .60
<b>Pigeon Queries</b> , 46 pages, $5 \times 7 \frac{1}{2}$ in.	P .25
<b>Squabs, Money In, Long &amp; Brinton</b> , 85 pages, $5 \times 7 \frac{1}{2}$ in.	P .55

## Dairy and Stock Books

<b>Forage Crops other than Grasses</b> , Shaw, 287 pages, $5 \frac{1}{2} \times 7 \frac{1}{4}$ .	C 1.10
<b>Keeping One Cow</b> , 136 pages, $5 \times 7$ .	C 1.00
<b>Management, Feeding of Cattle</b> , Shaw, 496 pages, $5 \frac{1}{2} \times 8$ .	C 2.15
<b>Milk and Its Products—(Mfg. of Butter and Cheese)</b> , Wing, 311 pages, $5 \frac{1}{2} \times 7 \frac{1}{2}$ .	C 1.65
<b>Silos, Ensilage and Silage</b> , Miles, 100 pages, $5 \times 7 \frac{1}{2}$ .	C .60
<b>Soiling Crops and the Silo</b> , Shaw, 366 pages, $5 \times 7 \frac{1}{2}$ .	C 1.60
<b>Swine in America</b> , Coburn, 650 pages, $6 \times 9$ .	C 2.65
<b>Swine, Diseases of</b> , Craig, 190 pages, $5 \times 7$ .	C .85
<b>Swine Husbandry</b> , Coburn, 312 pages, $5 \times 7$ .	C 1.60



# FLOWER SEED DEPARTMENT



**"Mikado"**  
or  
Rochester

in the open ground early in the Spring if desired, any protection in Winter.

**Half-Hardy Annuals, Biennials and Perennials** should not be sown in open ground until settled warm weather, though they can be sown in the house, if desired, early, and afterwards transplanted. The two latter need to be protected in Winter, or carried over until Spring in cold frames or greenhouses.

## Asters

As Fall-blooming annuals, Asters have no superior, and many of the new varieties rival the chrysanthemum in size and beauty. We offer a select collection of the choicest varieties and all of our seed is fresh from the most expert growers. Asters should have rich soil and abundant moisture. They are half-hardy annuals. Fine Plants in Season, see Plant Department.

### Finest New Asters

#### "Mikado" or Rochester

Another new type of Aster of great merit. A favorite with florists. Has very long, narrow petals, straight at the outside, but toward the center they cross and recross in splendid confusion, giving the bloom a beautiful, fluffy fullness. Mikado is very vigorous, with strong branching habit, producing a blossom on every shoot.

**Lavender, Pink, White, Pkt., 15c;  $\frac{1}{2}$  oz., \$1.00.**

#### "Crego Giant" Aster

The "Giant Crego" is distinct in every way, and its magnificent flowers, often 6 inches in diameter, are fully equal to chrysanthemums. They have rare beauty of form and brilliant coloring, are very vigorous, and free flowering; blooms are borne on long stems. **White, Shell Pink, Rose, Purple.**

**Pkt., 15c  $\frac{1}{2}$  oz., \$1.00.**



**Annual and Perennial Bedding Plants**—See Plant Dept.

## ASTERS—Continued

## New 1915—Pacific Beauty

**Pacific Beauty** is indeed a rare beauty, the color being a rich true lavender of great brilliancy, with the big fluffy blooms gracefully poised on long strong stems.

**Pacific Beauty** is an Oregon product originating with one of our foremost Aster specialists and its great vigor, freedom of bloom, keeping qualities, and distinctive coloring, mark it as a novelty of the greatest merit. Try "Pacific Beauty."

Price pkt., 25c.

## Lavender Gem

This beautiful new aster of the comet type is an exquisite shade of true lavender, being one of the finest yet produced. Is free flowering, erect habit, medium early. Every florist should grow this aster.

Pkt., 15c;  $\frac{1}{8}$  oz., \$1.00.

## Daybreak

Flowers are full, large and round, borne freely on long stems. Color a dainty shell pink. Very early. Height, 18 inches.

Pkt., 10c;  $\frac{1}{8}$  oz., 75c.

## Purity

Same as Daybreak, excepting color, which is a pure, glistening white. Pkt., 15c;  $\frac{1}{8}$  oz., 75c.

## Queen of the Market

Best early Aster, of graceful spreading habit. Two weeks ahead of other varieties.

**Rose, White, Light Blue, Crimson, Dark Blue, Mixed** Pkt., 10c;  $\frac{1}{4}$  oz., 40c.

## Giant Comet

One of the handsomest of the tall growing sorts; flowers large and beautiful; petals long and twisted.

**Rose, Crimson, Light Blue, Dark Blue, White or Mixed.** Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

## Acroclinium—Everlasting

Elegant annual, everlasting, producing beautiful daisy-like flowers, resembling the Rhodanthe. Fine for Winter bouquets. Gather them partially opened and dry in the shade. Height ten to fifteen inches.

**Mixed, all colors, pkt., 5c.**

## Agrostemma—Coronaria

Strikingly beautiful for beds, ribbons and borders. Its graceful, pink-like flowers remain fresh a long time after being cut, and are very handsome in bouquets. Thrives in any soil.

## Perennial.

Pkt., 5c.

## Anchusa—Italica

**Dropmore.** A splendid plant for hardy borders growing to a height of about 5 ft. Remarkable for its free and continuous flowering habit. Flowers are of a beautiful gentian-blue color.

Pkt., 15c.

## Amarantus

Our warm Summers suit admirably the varieties of *Amarantus* cultivated for ornament. These are plants which are striking on account of their foliage or peculiar mode of bloom.

**Melanchollus Ruber. Deep red foliage; dwarf.** Pkt., 5c.

**Caudatus.** Graceful, drooping flowers. Pkt., 5c.

**Tricolor, or Joseph's Coat.** Foliage scarlet yellow and green. Pkt., 5c.

**Antirrhinum**—See Snap Dragon, Page 72



NEW  
“PACIFIC  
BEAUTY”  
Grown in Oregon

## Plants in Season

## Semple's Late Branching

A magnificent strain; flowers large, beautiful, double, and borne on long stems.

**White, Rose, Shell Pink, Lavender, Purple or Mixed.** Pkt., 10c;  $\frac{1}{4}$  oz., 35c.

## Hardy Perennial Asters

Michaelmas Daisy

Handsome flowers of easy culture, that appear at a time when flowers are scarce. Make an attractive garden display and are very useful as cut flowers.

**Large Flowering Mixed, pkt. 10c.**

## Alyssum

Every garden should have plenty of Sweet Alyssum; its small, white flowers, borne in great profusion, are delicately fragrant and valuable for cutting; it is a good basket and pot plant, and valuable for carpet bedding. In the border sow thickly so as to make a mass. It is desirable to sow the seeds early in Spring or even the previous Autumn. Hardy annual. Plants in season.

**Marlimum. Sweet.** Pkt., 5c; oz., 30c.

**Marlimum. Little Gem.** Pkt., 5c; oz., 50c.

**Procumbens.** Of trailing habit; profuse bloomer.

Pkt., 10c;  $\frac{1}{4}$  oz., 20c;

**Saxatille.** Perennial. Yellow flowers.

Pkt., 5c;  $\frac{1}{4}$  oz., 20c.

## Ageratum

**Mexicanum Nanum,**

Fine for bouquets and useful for beds, borders and pot plants. The flowers are graceful tufts of fine petals that remain fresh a long time after being cut. The plant blooms all Summer. Half hardy annual six to eighteen inches high. Plants in season.

**Light Blue, White or Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

## Ammobium

One of the hardest everlasting. The flowers are not large, but beautiful in form, and pure white. Very desirable for Winter bouquets. An easily grown annual.

Pkt., 5c.



“DIAMOND” LAWN GRASS—Makes an Evergreen Velvet Turf.

**Arabis**—Rock Cress

The earliest, prettiest Spring flower. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequaled for rockeries or edgings; withstands the drought and is always neat.

**Alpina.**

Pkt., 5c.

**Alpina Grandiflora Superba** (new). Pkt. 10c.**Auricula**—Primula Aricula

Beautiful, Spring-blooming flowers. Hardy, perennial. **Finest Mixed.** Pkt., 25c.

**Asparagus Plumosus**—Asparagus Fern

One of the prettiest house plants. The leaves are bright green, gracefully arched, surpassing Maiden-hair Ferns in grace, delicacy of texture and richness of color. **For plants, see Plant Department.** Pkt., 25c; 50 seeds, 50c.

**Asparagus Sprengeri**—Emerald Feather

One of the best of the new so-called ferns. Feathery foliage; useful for bouquets, wreaths or sprays, remaining perfect for weeks after cutting. Grows freely the whole year round. **(For plants see Plant Department.)** Pkt., 10c; 50 seeds, 25c.

**Bachelor's Button****Centaurea Cyanus** or Corn Flower

A hardy annual, easily cultivated. Has recently been greatly improved, and now produces handsome flowers of a great variety of rich colors. Borne on tall, branching stems, with but little foliage. Striking and handsome.

**Cyanus.** Fine single mixed. Pkt., 5c; oz., 25c.**Cyanus.** Fine double mixed. Pkt., 10c; oz., 50c.**Cyanus. Alba,** single white. Pkt., 5c; oz., 35c.**Cyanus. Azurea,** single blue. Pkt., 5c; oz., 35c.**Balloon Vine**

A rapid, graceful climber, with inflated seed pods; flowers white. Tender annual. Pkt., 5c; oz., 25c.

**Browallia**—Lavatera

Handsome, free flowering annual. Covered all Summer with bright, rich blue and white flowers. Worthy of more general cultivation. Eighteen inches high.

**Mixed Pkt., 5c.****Brachycome**—Swan River Daisy

A charming flower in white and blue varieties. The plants grow about twelve inches in height and bloom freely. They make elegant border plants.

**Blue, White, Rose and Cholce Mixed.** Pkt., 5c.**Balsam****Lady Slipper**—Touch-me-not.

Exceedingly handsome plants, producing masses of attractive and various colored flowers. Half hardy annual.

Tall Double Camellia Flowered Mixed.

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.Dwarf, Double, Mixed. Pkt., 5c;  $\frac{1}{4}$  oz., 15c.**Begonia**

Begonias are among the most beautiful of flowering plants especially adapted to pot culture. Try our select seed; the finest in the world.

**REX.**—Ornamental leaved varieties: very handsome. **Mixed Pkt., 25c.****INTERNATIONAL PRIZE.**—Single mixed. Pkt., 25c.**DOUBLE TUBEROUS ROOTED**—Finest strain. Pkt., 25c.**Canna**—Indian Shot

Ornamental, tropical looking plants of easy culture; large and beautiful flowers. Hardy perennial. For Canna Bulbs, see Plant Department.

Crozy's New Large Flowering Mixed.

Pkt., 10c; oz., 25c.

New French and German varieties, mixed.

Pkt., 10c; oz., 25c.

**Canary Bird Flower**

Tropaeolum Canariensis

Climbing plant with graceful foliage and yellow blossoms. Half-hardy annual. Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**Candytuft**—Iberis

Candytuft has long been among the most highly prized of garden annuals. The best effect is produced by raising the plants in masses, and sowing the seeds where the plants are to bloom.

**ODORATA.**—Sweet scented; white.

Pkt., 5c; oz., 25c.

**WHITE EMPRESS.**—Very sweet and attractive.

Pkt., 10c; oz., 50c.

**CARMINE OR PURPLE.** Pkt., 5c; oz., 40c.**DARK CRIMSON.** Pkt., 5c; oz., 40c.**MIXED.**—All colors. Pkt., 5c; oz., 25c.**SEMPERVIRENS.**—Perennial. White.Pkt., 10c;  $\frac{1}{4}$  oz., 25c.**Calliopsis**—Annual

Very showy and attractive. Always covered with a mass of bright flowers. A fine cut flower.

**CHOICE MIXED DWARF.**—Single.Pkt., 5c;  $\frac{1}{2}$  oz., 25c.**CHOICE MIXED.**—Double.Pkt., 5c;  $\frac{1}{2}$  oz., 25c.**Coreopsis**—Perennial

**LANCEOLATA.**—A perennial, blooming the first year; flowers rich yellow, single; very fine for cutting.

Pkt., 10c;  $\frac{1}{4}$  oz., 25c.**Calceolaria**

Very handsome and much admired. Produces a profusion of beautiful flowers of unique form and colorings. Fine for pot culture.

**HYBRIDA.**—Finest mixed.

Pkt., 50c.

**Calla**

**DEVONIENSIS.**—A fine calla that will bloom from seed in one year. For Calla Bulbs, see Plant Dept.

Pkt., 15c; 25 seeds, 50c.

**AETHIOPICA.**—The well-known "Lily of the Nile."

Pkt., 15c.

**Calendula**—Pot Marigold

The well-known Pot Marigold, valued by Europeans for flavoring soups and stews. Flowers are dried in Fall and kept in paper bags for use. In mild climates this plant will bloom nearly all the year round. Plant in early Spring in open ground.

Double Mixed, Pkt., 5c;  $\frac{1}{2}$  oz., 15c.**Catchfly**—Silene

A hardy annual, yielding for a long time a profusion of umbels of bright colored flowers. The plant is covered with glutinous moisture, to which flies adhere; hence its name. Fine mixed, all colors.

Pkt., 5c; oz., 25c.

## Carnation

Universally admired, deliciously fragrant. There is no more satisfactory flower to grow and few that are as lasting. The seed we offer is the finest obtainable and our new strains of perpetual flowering carnations will bloom the first year. **FINE PLANTS IN SEASON. SEE PLANT DEPARTMENT.**

**CHABAUD EVERBLOOMING.**— Flowers in five to six months from sowing.

**Extra Select, Double White, Red or Yellow.** Pkt., 15c.

**Extra Choice Double Mixed.** Pkt., 15c.

**Fine Double Mixed.** Pkt., 10c.

**AMERICAN MIXED.**— Finest new varieties. Extra choice. Pkt., 25c.

**GRENAUDIN.**— Scarlet; charming double scarlet, dwarf and compact; very early, free flowering; especially fine for borders. Pkt., 15c;  $\frac{1}{8}$  oz., 75c.

### Margaret Carnations

**Bloom in four months from seed.** Separate colors, white, yellow, dark red, mixed. Pkt., 10c;  $\frac{1}{8}$  oz., 30c;

### Canterbury Bells—Campanula

Very ornamental garden plants of the easiest culture; hardy biennial, two and a half feet high, producing large, nodding and charming bell-shaped flowers of many exquisite shades.

**SINGLE MIXED.** Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**MEDIUM DOUBLE MIXED.** Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**CALYCANTHEMA**—(Cup and Saucer.) White, Rose, Lilac, Blue or mixed. Pkt., 5c;  $\frac{1}{4}$  oz., 50c.

**PERSICIFOLIA.**— Hardy perennial; very fine; blooms in June. Mixed. Pkt., 15c;  $\frac{1}{4}$  oz., 50c

**DIAMOND MIXTURE.**— Finest sorts; all colors, single and double. Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

### Castor Bean—Ricinus

Highly ornamental, of stately growth and having large leaves of bronze or glossy green; of very easy culture.

**SANGUINEUS.**— Brilliant scarlet stems and fruit. Pkt., 5c; oz., 20c.

**ZANZIBARIENSIS.**— Surpasses all in size and beauty of colors. Mixed. Pkt., 5c; oz., 20c.

**BORBONIENSIS ARBOREUS.**— The largest variety. Pkt., 5c; oz., 20c.

**MIXED.**— Best varieties. Pkt., 5c; oz., 15c.

**NEW HYBRID. PANORAMITANUS.**— Dark brown leaves; very decorative. Pkt., 5c. oz. 25c.

### Cosmos

Seed sown in March or April and transplanted to open ground will produce plants three to five feet high by September, which thereafter and until November, will yield hundreds of blossoms three inches across; they are of various shades, from pure white to purplish crimson. Both foliage and flowers are unsurpassed for bouquets and vases. Annual. (Plants in season).

**LADY LENOX.**— A magnificent type of extraordinary size and rare beauty. Color, a delightful pink. Beautiful under artificial light. The oval petals form a perfectly circular flower which keeps well when cut. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**KLONDYKE.**— Blooms very early and continuously; three to four feet high; flowers large, golden yellow and borne on long stems. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**EARLY DAWN.**— White, flushed pink; very early. Pkt., 10c;  $\frac{1}{4}$  oz., 35c.

**MARGUERITE.**— New and odd; very pretty, petals fringed. Mixed. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**MAMMOTH FLOWERING.**— White, pink, crimson or mixed. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

### Celosia Plumosa—(Feathered)

**THOMPSONI MAGNIFICA FEATHERED.**— Splendid new class, for pots or open ground, especially fine for market. Mixed.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**MIXED.**— Colors of great brilliancy. Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

### Centaurea

**ODORATA CHAMELEON.**— Grown for its handsome fragrant, yellow and rose flowers; superb. Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**IMPERIALIS.**—(Sweet Sultan). A fine, sweet-scented flowering variety. Hardy annual. All colors mixed. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**YELLOW SWEET SULTAN.**—(Suaveolens, Grecian Corn Flower.) Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

### Chrysanthemum

Very showy, effective and desirable as Summer flowering plants. Hardy annuals.

**CORONARIA.**— Double mixed.

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**SHASTA DAISY ALASKA.**— (Leucanthemum hybridum) Perennial, see Daisy. Pkt., 15c.

**FRUTESCENS.**—(Marguerite, or Paris Daisy). Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**CARINATUM.**— Single mixed.

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

### Cineraria

Magnificent and indispensable flowering plants for the window garden. The flowers of white, blue, violet and crimson shades, covering the plant with a sheet of bloom.

**HYBRIDA.**— Grandiflora, prize mixed. Extra choice.

Pkt., 50c.

**HYBRIDA.**— Fine mixed.

Pkt., 15c.

**DUSTY MILLER.**—(Maritima Candidissima)— Beautiful silvery leaved border plant; half hardy perennial.

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

### Clarkia

Handsome, free flowering annuals of easy cultivation. Produce a fine effect massed in beds. Flowers are very bright and attractive. Single double mixed.

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

### Clianthus Dampieri—Glory Pea

A fine pot plant, bearing clusters of curiously shaped and very brilliantly colored flowers, scarlet with black center; half hardy perennial. Pkt., 20c.

### Celosia Cristata

#### Cockscomb

Graceful, free-blooming, half-hardy annuals.

**FINEST VARIETIES.**— Mixed

Pkt., 5c;  $\frac{1}{4}$  oz., 35c.

**PRESIDENT THIERS.**— Dwarf, crimson comb.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Cobaea Scandens**

(Plants in season.)

A handsome, rapid-growing, climbing plant, having large, bell-shaped flowers, beautiful foliage and peculiarly delicate and curious tendrils.

**Purple,** Pkt., 10c;  $\frac{1}{4}$  oz., 25c;  
**White,** Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Aquilegia**—Columbine

Universal favorite for hardy borders and beds. Perennial.

**CANDIDISSIMA.**—Large snowy white Pkt., 15c; 1-16 oz., \$1.00

**COERULEA.**—Hybrid Mixed. Pkt., 10c;  $\frac{1}{8}$  75c

**ROSE QUEEN.** Pkt., 15c; 1-16 oz., \$1.00.

**COERULEA.**—Fl. Plena (double). Splendid. Pkt., 15c;  $\frac{1}{4}$  oz., \$1.00.

**CHRYSANTHA.**—Golden Yellow Pkt. 10c;  $\frac{1}{4}$  oz., 50c.

**GLANDULOSA VERA.**—Deep blue with white corolla. Very free flowering. Pkt., 15c; 1-16 oz., \$1.50

**Coleus**

Probably the best known and most popular of ornamental foliage plants. Leaves of all shades and colors. Tender perennial.

**HYBRID MIXED.** Pkt., 15c.  
**EXTRA CHOICE MIXED.**—(Benary). Pkt., 25c.

**Cyclamen**

Beautiful Winter and Spring flowering plants for the window and greenhouse. Not only are the flowers of striking beauty, but the foliage is also highly ornamental. The colors range through shades of pink, crimson, white, spotted, etc. Delicately fragrant. Bulbs in season.

**GIGANTEUM HYBRIDUM.**—White, dark red, salmon pink or Mixed. Pkt., 25c.

**PAPILIO. BUTTERFLY.**—Mixed. Pkt., 25c; 100 seeds, \$1.00.

**Cypress Vine**—Ipomoea Quamoclit

A climber of rapid growth, having handsome fern-like foliage and a profusion of bright, attractive flowers.

White, scarlet or mixed. Pkt., 5c; oz., 25c.



DAHLIAS—See Plant Department

**Dracaena**

Ornamental greenhouse plant. Very desirable. **INDIVISA LINEATA.**—Narrow, dark foliage.

Pkt., 10c.

**Daisy**—Bellis Perennis

A well-known and popular, low-growing plant bearing beautiful flowers. Hardy perennial.

**LONGFELLOW.**—Double Pink.

Pkt., 15c; 1-16 oz., 40c.

**GIANT DOUBLE.**—White, Red or Mixed.

Pkt., 15c; 1-16 oz., 40c.

**DOUBLE QUILLED.**—Red

Pkt., 25c; 1-16 oz., 60c.

**SHASTA ALASKA.**—Very hardy; profuse bloomers; flowers very large and borne on long stems; single; petals pure, glistening white; dark center.

Pkt., 15c.

See Chrysanthemum

**Datura**

Large, strong-growing plants, trumpet-shaped flowers, white, sometimes tinted with blue. Roots can be preserved in the cellar, like Dahlias.

**FASTUOSA HUBERIANA.**—Double mixed.

Pkt., 5c; oz., 50c.

**CORNUCOPIA.**—Very fragrant.

Pkt., 5c.

**Euphorbia**

Fine, ornamental, foliage plants. Hardy annual.

**VARIEGATA.**—Snow on the Mountain. Variegated foliage. 2 feet.

Pkt., 5c.

**HETEROPHYLLA.**—Painted Leaf. Annual Poinsettia. 3 feet.

Pkt., 10c.

**Eschscholtzia**—California Poppy

These are among our most beautiful and popular annuals, being of the easiest culture and giving great satisfaction. They commence to bloom within a few week's time from Spring-sown seed and continue to flower profusely until late in the Autumn, forming nice, bushy plants, one foot high.

**SINGLE WHITE OR MIXED.**

Pkt., 5c; oz., 35c.

**GOLDEN WEST.**—Yellow with orange center—flowers large.

Pkt., 10c; oz., 50c.

**BURBANKS CRIMSON.**—Pkt., 10c; oz., 75c.

**CARMINE KING.**—Pkt., 5c; oz., 50c.

**MANDARIN.**—Inner side of petals rich orange, outer side brilliant scarlet; very striking; single.

Pkt., 5c; oz., 40c.

**DOUBLE MIXED.** Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

(For other sorts see Poppies.)

**Echinocystis, Lobata**—Wild Cucumber

A rapid-growing climber. Very good for covering old fences or trellises. Hardy annual.

Pkt., 5c; oz., 25c.

**Digitalis**—Fox Glove

A tall growing biennial, with large leaves and spikes of vari-colored and spotted flowers. A magnificent plant. Fine for borders or background. Easily grown. Mixed or white.

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**Mirabilis Jalapa**—Four O'clock**Marvel of Peru**

A hardy annual, growing luxuriantly in any ordinary soil, and bearing a profusion of bright, handsome flowers of various colors, shades and markings. Flowers open at four o'clock, close in the morning.

**CHOICE MIXED.**

Pkt., 5c; oz., 15c.

**DAHLIA**

A magnificent, Fall-blooming tuberous-rooted plant, which can be readily started from seed.

**DOUBLE MIXED.** Pkt., 10c;  $\frac{1}{4}$  oz., 60c.

**SINGLE MIXED.** Pkt., 10c;  $\frac{1}{4}$  oz., 35c.

**CACTUS.**—Flowers odd and fantastic in shape; all colors.

**DOUBLE MIXED.** Pkt., 20c;  $\frac{1}{8}$  oz., 50c..

**TWENTIETH CENTURY.**—New single Dahlias of recent introduction; flowers large and handsome.

Pkt., 10c;  $\frac{1}{8}$  oz., 25c.

**NEW SEMI.DOUBLE GIANT PEONY-****FLOWERED.**

Pkt., 20c;  $\frac{1}{8}$  oz., 50c.

For Dahlia Roots, see Plant Department.

## GERANIUM

A half-hardy perennial, easily and quickly grown from seed.

**ZONALE.**—Extra choice, single mixed, large flowering. This is the well-known bedding Geranium.

Pkt., 10c.

**ZONALE.**—Choice Double Mixed. Very finest and newest sorts.

Pkt., 25c.

**LADY WASHINGTON.**—(*Pelargonium*). Foliage green; flowers large, handsome, oddly marked; fine for pot culture. Finest mixed.

Pkt., 25c.

For finest true to name Geraniums, See plant department. We deliver them postage free, fine well rooted plants.

## Gentiana

Fine, showy flowers. Should be in every flower garden. Hardy.

**ACAU'LIS.**

Pkt., 5c.

## Geum

Chiloense.

Hardy perennial. Free-blooming plants. Fine for bouquets.

**SCARLET. DOUBLE.**

Pkt., 5c.

## Globe Amaranth—Gomphrena

An old favorite, everlasting flower.

**MIXED.**

Pkt., 5c;  $\frac{1}{4}$  oz., 20c.

## Gypsophila—Baby's Breath

A pretty, free-flowering plant. Fine for bouquets.

**PANICULATA.**—Foliage fine; covered with tiny pure white flowers. Hardy, perennial.

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**REPENS.**—Dwarf White, for Rock-work.

Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

## Gaillardia—Blanket Flower

Exceedingly beautiful, half-hardy annuals and perennials, making very showy plants, one to two feet high, for the flower garden. Grown in masses they are especially effective; large flowers, two to three inches across, produced from early Summer until frost; unrivaled for cutting.

**PICTA.**—Large, handsome, crimson and orange flowers. Hardy annual. Single

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**PICTA LORENZIANA.**—Double; finest mixed; annual.

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**MIXED.**—Annual. Many shades of yellow, orange and scarlet.

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**GRANDIFLORA MAXIMA.**—Perennial. Golden.

Pkt., 10c.  $\frac{1}{4}$  oz., 25c.

## Gourds

Of rapid growth, and bearing curious fruits of various sorts.

**Calabash—**

Pkt., 5c; oz., 25c.

**Dipper, Bottle and Egg-shaped.** Pkt., 5c; oz., 25c

**Large varieties. Mixed.** Pkt., 5c; oz., 25c.

**Small varieties. Mixed.** Pkt., 5c; oz., 25c.

## Helichrysum—Straw Flower

**MONSTROSUM.**—Everlasting. One of the best for Winter bouquets. Hardy annual. Double mixed.

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

## Hyacinth Bean—Dolichos Lablab

Rapid growing, ornamental, climbing annuals, bearing clusters of beautiful purple and white flowers, followed by highly ornamental seed pods. Mixed.

Pkt., 5c; oz., 15c.

## Forget-me-not—Myosotis

Beautiful Spring favorites, of easy growth, bearing clusters of lovely, small flowers. They are perennials and are hardy enough to remain in the open ground except in very cold latitudes. Fine for borders and shady situations

**ALPESTRIS.**—Of trailing habit, with pretty flowers. Blue or mixed. Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**VICTORIA.**—Flowers large, bright azure blue; fine for borders and pots. Pkt., 10c;  $\frac{1}{8}$  oz., 25c.

**SEMPERFLORENS.**—Dwarf; continuous bloomer; blue.

Pkt., 10c;  $\frac{1}{8}$  oz., 50c.

## Gilia

Gilias are free-flowering, hardy annuals, one foot high, with finely cut foliage and clusters of small, delicate flowers, white, lilac, and rose color; desirable for cutting and suitable for beds, rockwork, and edgings. White, Red, Rose and Mixed.

Pkt., 5c;  $\frac{1}{2}$  oz., 15c.

## Gloxinia

Most charming, greenhouse plants of dwarf habit. Their flowers are produced in greatest profusion, and of the most exquisite and gorgeous colors, many of which are magnificently spotted, mottled and blended. Under the commonest culture they bloom continuously for months.

**HYBRIDA GRANDIFLORA.**—Splendid mixture of finest varieties.

Pkt., 25c.

**ROBUSTA.**—Erect, hardy, superb mixture.

Pkt., 25c.

## Grevillea Robusta—Silk Oak

Very beautiful and graceful foliage plant with fern-like foliage—a splendid pot plant. Pkt., 10c.

## Godetia

The Godetias are profuse and constant bloomers, and their delicate tints of crimson, rose and white render them very attractive. Hardy annuals.

**SEMI-DWARF.**—Fine mixed.

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**GLORIOSA. LORD ROBERTS.**—Dark red. compact, fine.

Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

## Heliotrope—Cherry Pie

Delightfully fragrant, free-blooming, tender, perennial plants. Splendid for bedding or pot culture. One foot high of spreading habit. The fragrance of its flowers can not be excelled in exquisite delicacy. Invaluable for bouquets.

**CHOICE MIXED.**

Pkt., 10c;  $\frac{1}{8}$  oz., 25c.

**MAMMOTH FLOWERED.**—Blue, white or mixed very fine.

Pkt., 15c;  $\frac{1}{8}$  oz., 50c.

## Hibiscus—Marshmallow

Strong-growing plants of very easy culture and exceedingly showy. Has large, cup-shaped flowers. Hardy annual. Extra mixed.

Pkt., 5c.

**Hunnemannia**—Giant Yellow Tulip Poppy

**FUMARIAEFOLIA.**—Best of the poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large, buttercup-yellow, poppy-like blossoms, and never out of flower until hard frost.

Pkt., 10c;  $\frac{1}{4}$  oz., 25c.



## Hollyhock, or Althaea

THE modern Hollyhock is quite different and much more beautiful than the plant of twenty years ago being much more compact in growth; the flowers are larger, richer colored, and the double varieties are fuller and of better form. For a background to a flower garden there can be nothing better. Hardy perennials; five feet high.

**CHATERS.**— Superb strain, varieties of greatest perfection. Single mixed.

**DOUBLE.**— White, crimson, pink, yellow, salmon maroon and lilac. **Pkt., 10c;  $\frac{1}{4}$  oz., 60c.**

**MIXED.**— All double varieties. **Pkt., 10c;  $\frac{1}{4}$  oz., 50c.**

**ALLEGHENY.**— A popular variety with very large flowers; petals beautifully fringed and crinkled; coloring rich and attractive. **Double Choice Mixed. Pkt., 10c;  $\frac{1}{4}$  oz., 50c.**

### Ice Plant

#### *Mesembrianthemum Crystallinum*

Pretty Summer trailing annual for vases and rock work; leaves covered with ice-like drops. **Pkt., 5c; oz., 35c.**

**Kochia Trichophylla**—Summer Cypress or Fire Bush.

Annual forms highly decorative bushes, foliage green, turning to fiery red in Autumn. **Pkt., 10c;  $\frac{1}{4}$  oz., 25c.**

### Lantana

A free-flowering shrubby plant, suitable for outdoor or pot culture. The flowers emit an agreeable odor and are of many shades of purple, orange and white. Half-hardy perennial.

**HYBRIDA FINE MIXED.** **Pkt., 10c;  $\frac{1}{4}$  oz., 25c.**

### Lupinus—Lupin

Very desirable shrubby plants, bearing long spikes of various colored flowers.

**ANNUAL MIXED.** **Pkt., 5c; oz., 20c.**

**PERENNIAL BLUE, PINK, WHITE, OR MIXED.** **Pkt., 5c; oz., 30c.**

### Larkspur—Delphinium

A very ornamental class of profuse blooming plants. Their tall spikes of many colored flowers produce a striking effect when planted in groups.

**DWARF ROCKET.**—Finest colors. Double mixed. Hardy annual. **Pkt., 5c;  $\frac{1}{2}$  oz., 25c.**

**PERENNIAL MIXED.**— Single. **Pkt., 5c;  $\frac{1}{4}$  oz., 20c.**

**STOCK FLOWERED, OR TALL BRANCHING.**—Finest double mixed. **Pkt., 10c;  $\frac{1}{4}$  oz., 25c.**

**CHINESE AZUREUM.**— Single blue; fine for cutting. **Pkt., 10c;  $\frac{1}{4}$  oz., 30c.**

### Mignonette—Reseda.

A quick-growing annual, highly esteemed for its delicate fragrance. It grows most rapidly and produces the largest and finest spikes of blossoms during cool, moist weather of early Spring and late Fall months, but will flower freely throughout the Summer from seed sown early in Spring. A second planting should be made about the first of August to furnish large, fine spikes of flowers during the cool Fall months.

**ODORATA GRANDIFLORA.**— Large, well-formed, fragrant flowers. **Pkt., 5c; oz., 25c.**

**ALLAN'S DEFIANCE.**— A choice strain for forcing. Spikes of enormous size and intensely rich perfume. One of the most desirable for open ground. **Pkt., 10c;  $\frac{1}{2}$  oz., 50c.**

**PARSON'S WHITE.**— Flowers almost pure white; very fine. **Pkt., 10c;  $\frac{1}{2}$  oz., 50c.**

## New Annual Hollyhocks

### *Hybrida Semperflorens.*

This splendid variety will bloom in August, from Spring planting, continuing until frost. This is a great advantage, as other varieties do not bloom until the second year. Try them.

**Finest new single mixed, pkt., 10c;  $\frac{1}{4}$  oz. 50c.**

**Leontopodium Alpinum**—Edelweiss  
Hardy perennial, very curious flowers. **Pkt., 25c.**

### *Linum*—Crimson Flax

**ANNUAL.**— Beautiful and effective; hardy, about 18 inches high; covered with bright scarlet flowers. **Pkt., 5c; oz., 25c.**

**PERENNIAL.**— Mixed. **Pkt., 5c; oz., 35c.**

### *Lobelia*

Delicate, low-growing, annual plants of the greatest value for borders, ribbons, edgings, rockwork and hanging baskets.

**HYBRID HAMBURGIA.**—New; light blue with white eye, long, drooping flower stalks; fine for hanging baskets or boxes; grows rapidly. **Pkt., 10c;  $\frac{1}{8}$  oz., 50c.**

**GRACILIS.**— Blue, trailing; beautiful for baskets. **Pkt., 5c;  $\frac{1}{4}$  oz., 25c.**

**CRYSTAL PALACE COMPACTA.**—Plant dwarf flowers very fine and rich, deep blue; finest for bedding and edging. **Pkt., 10c;  $\frac{1}{8}$  oz., 50c.**

**COMPACTA.**— Finest mixed. **Pkt., 5c;  $\frac{1}{4}$  oz., 50c.**

**COMPACTA EMPEROR WILLIAM.** **Pkt., 10c;  $\frac{1}{8}$  oz., 40c.**

**WHITE LADY.**— New, white flowering. **Pkt., 10c;  $\frac{1}{4}$  oz., 50c.**

**CARDINALIS, PERENNIAL.**— Taller than other sorts; flowers rich red. **Pkt., 10c;  $\frac{1}{8}$  oz., 50c.**

### *Lychnis*

#### *Rose Champion. Jerusalem Cross.*

There are few plants that produce more brilliantly colored blossoms than Lychnis. They are borne in clusters and continue fresh and brilliant for a long time. Hardy perennials, one to three feet high.

**HAAGEANA HYBRIDA.**— Mixed. **Pkt., 10c;  $\frac{1}{8}$  oz., 25c.**

**MACHET.**— White. Splendid Dwarf variety best white. **Pkt., 15c;  $\frac{1}{2}$  oz., \$1.00.**

**GOLDEN QUEEN.**— Dense, dwarf growth; flowers golden yellow; deliciously fragrant. **Pkt., 10c;  $\frac{1}{2}$  oz., 50c.**

**MACHET.**— Red, Victoria; dwarf, compact flowers red; fine. **Pkt., 10c;  $\frac{1}{2}$  oz., 50c.**

**Mimosa**—Sensitive Plant

**PUDICA.**—Very curious and interesting plant; its leaves closing if touched or shaken. Annual. **Pkt., 5c.**

**Morning Glory**

The tall varieties are popular, well known, rapid growing climbers of the easiest cultivation. Very fine for covering arbors, trellises, porches, etc. The Minor, or Dwarf varieties flower very freely and do not require support.

**CONVOLVULUS MAJOR.**—Tall, choice single, mixed, all colors. **Pkt., 5c; oz., 15c.**

**DOUBLE MIXED.**—Tall. **Pkt., 10c; 1/2 oz., 25c.**

**CONVOLVULUS MINOR.**—Dwarf mixed. **Pkt., 5c; oz., 25c.**

**IMPERIAL JAPANESE FRINGED.**—These have very large fringed flowers in a great variety of the most exquisite colorings; handsome, variegated foliage. Mixed. **Pkt., 10c; oz., 25c.**

**JAPANESE DOUBLE MIXED.**—This double Japanese sort is very fine in leaf, flower and growth. **Pkt., 25c; oz., \$1.00**

**Moon Flower**—*Ipomoea Mexicana*  
Grandiflora

Rapid growing climber belonging to the Morning Glory family. The flowers are large, waxy white and very showy. **Pkt., 10c; 1/4 oz., 20c.**

**Marigold, or Tagetes**

The French and African Marigolds are valuable for their flowers in Summer, and can be grown to advantage in little clumps with other plants in the front of shrubberies or in the garden border. Color of flowers, yellow, red, brown and variegated.

The African varieties are the taller in growth, and produce large, self-colored blossoms. The French varieties are smaller, some of them being elegantly striped and spotted.

**AFRICAN.**—Tall or dwarf, double mixed. **Pkt., 5c; 1/4 oz., 20c.**

**FRENCH.**—Tall or dwarf, double mixed. **Pkt., 5c; 1/4 oz., 20c.**

**Mimulus**

**MOSCHATUS, OR MUSK PLANT.**—Cultivated for its rich, musky odor. Should have a rich soil and ample moisture. Hardy perennial. **Pkt., 10c.**

**TIGRINUS NANUS, OR MONKEY FLOWER.**—Mixed, beautifully spotted, all colors. **Pkt., 10c.**

**Nicotiana**

A very showy plant, producing star-shaped flowers of delicious perfume. Taken up in the Fall, cut back and potted, will bloom freely all Winter. Half hardy annual, three feet high.

**AFFINIS.**—White. **Pkt., 5c; 1/4 oz., 25c.**

**HYBRIDIA.**—Splendid mixed. **Pkt., 10c; 1/4 oz., 50c.**

**SYLVESTRIS.**—Pure white, fragrant, drooping flowers; deep green foliage. **Pkt., 5c; 1/4 oz., 25c.**

**SANDERAE.**—Resembles the Affinis, but unlike that variety, does not close up in the daytime. The plant is literally covered with carmine-red, fragrant flowers. **Pkt., 15c.**

**Nemophila**—Love Grove

Hardy annuals of neat, dwarf, compact growth; fine for borders, pot culture or rockeries. Flowers blotched and beautiful. Blue, White and Mixed varieties. **Pkt., 5c; 1/2 oz., 15c.**

**Nigella****LOVE-IN-A-MIST, OR DEVIL-IN-THE-BUSH.**

Compact growing, free flowering plants with curious looking, showy flowers and finely cut foliage. Hardy annuals. Mixed.

**Pkt., 5c; 1/2 oz., 15c.**

**DAMASCENA.**—(Miss Jekyll.) Finest double blue flowers, with fern-like foliage.

**Pkt., 10c; 1/4 oz., 25c.**

**Passiflora**—Passion Flower

Most interesting and well-known climbers, bearing singularly beautiful flowers.

**MIXED.** **Pkt., 10c.**

**Pampas Grass**—*Gynerium Argenteum*

A noble ornamental grass, easily grown from seed, producing majestic plumes that are invaluable for Winter decorations. See Plant Dept. **Pkt., 5c.**

**Pentstemon**—Beard Tongue

Beautiful, hardy, perennial, herbaceous plants with extremely brilliant blooms. Their bell-shaped flowers are borne on long spikes, and are produced abundantly all Summer.

**MIXED.**

**Pkt., 5c.**

**Perilla Nankinensis**

Dark purple foliage plant. Half-hardy annual.

**Pkt., 5c.**

**Pueraria Thunbergia**—Kudzu Vine.

Beautiful Japan climber, hardy perennial with fragrant purplish-violet, wistaria-like flowers.

**Pkt. 10c; 1/4 oz., 50c.**

**Phlox Drummondi**

The blooms of Phlox Drummondi are unrivaled for richness and beauty of color, ranging from white to the deepest scarlet and purple. They are abundant, almost covering the foliage and of long duration. Very desirable, and easily grown. For cutting for bouquets or for bedding in masses they are unsurpassed. Hardy annual, one foot high.

**CHOICE MIXED.** **Pkt., 5c; 1/4 oz., 50c.**

**LARGE FLOWERING.**—Flowers large and brilliant. Mixed. **Pkt., 5c; 1/4 oz., 30c.**

**LARGE FLOWERING.**—Scarlet or white. **Pkt., 5c; 1/4 oz., 75c.**

**STAR PHLOX.**—(*Cuspidata*). Flowers have a distinctive star-like appearance, with white margins, excellent for bouquets. **Pkt., 10c; 1/4 oz., 30c.**

**DWARF.**—Mixed; finest flowering sorts. **Pkt., 10c; 1/4 oz., 50c.**

**Phlox Decussata**—Perennial

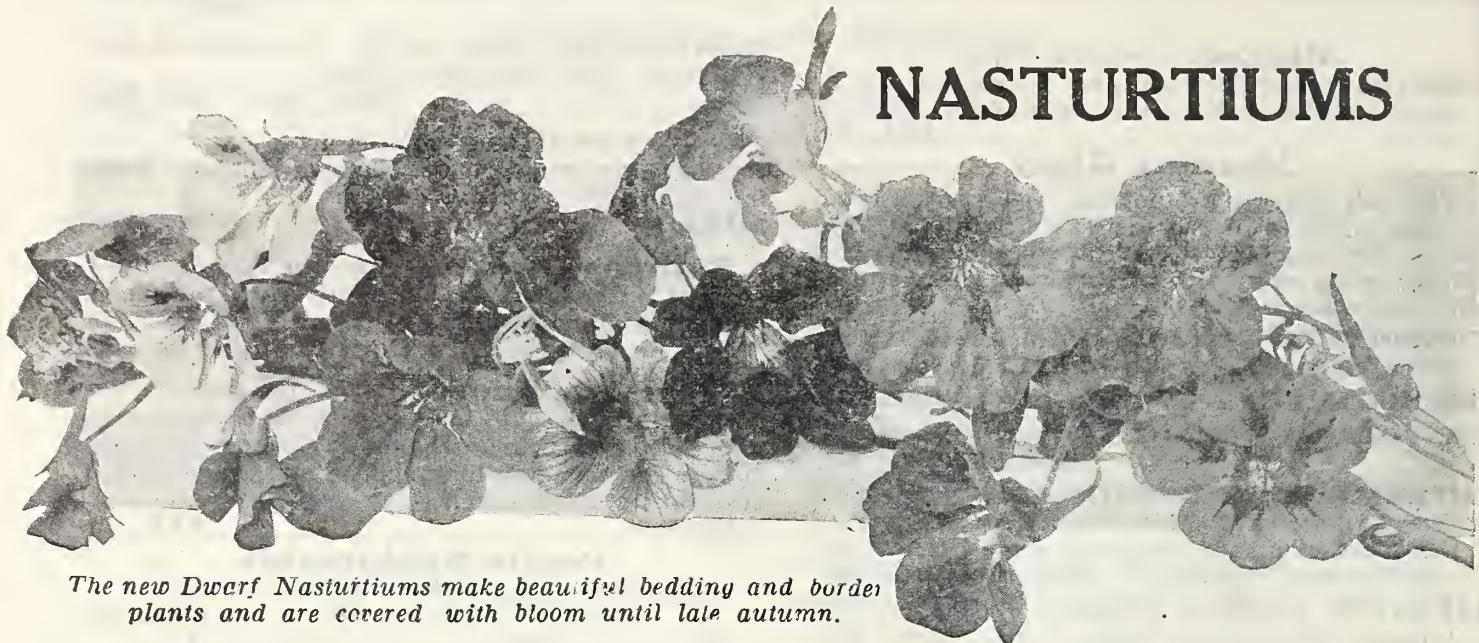
Hardy, perennial; mixed. **Pkt., 10c; 1/4 oz., 50c.**

**Perennial Phlox**—Plants

Newest and best varieties, fine large clumps. See plant department, page 82. **\$1.50 doz.**



# NASTURTIUMS



The new Dwarf Nasturtiums make beautiful bedding and border plants and are covered with bloom until late autumn.

**NASTURTIUMS** are hardy annuals, of easy cultivation and flower best where the soil is not too rich.

The new hybrids include various shades of rose, salmon, bright red, pale yellow, etc., either self-colored or spotted, mottled, striped and margined.

For covering trellises, fences, arbors, piazzas, trailing from vases, over rockwork, for bedding, etc., nothing can equal the gorgeous effect produced by their marvelous wealth of bloom, borne in uninterrupted splendor from early Summer until cut down by frost. The seeds, picked green and pickled in vinegar, have a piquant, appetizing flavor that is a valuable addition to relishes or pickles.

## NASTURTIUMS—Tall

**COQUETTE.**— Variable flowers marked and blotched in many brilliant colors.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**KING THEODORE.**— Large velvety crimson flowers, very attractive dark green leaves.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**MOONLIGHT.**— Soft primrose.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**SUNLIGHT.**— Large, bright golden yellow flowers. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**PRINCE HENRY.**— Fine lemon yellow, clear carmine blotches.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**TWILIGHT.**— Extra large light salmon, suffused rosy salmon.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**MIXTURE.**— Of standard tall varieties.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

## NASTURTIUMS—Dwarf

**CHAMELEON.**— Variable colorings in bronze, crimson and yellow, rich markings.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**CLOTH OF GOLD.**— Brilliant scarlet, golden yellow leaves. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**EMPEROR OF INDIA.**— Intense scarlet, purplish green leaves. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**PRINCE HENRY.**— Lemon yellow with carmine blotches. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**RUBY KING.**— Ruby red.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**VESUVIUS.**— A rich salmon orange, dark foliage.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**MIXTURE**— Of standard varieties.

Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c.

## NASTURTIUMS—Lobb's Climbing

A distinct strain of tall Nasturtiums, flowering more freely than the standard varieties.

**ASA GRAY.**— Large, bright lemon flowers.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**BLACK PRINCE.**— Such a rich, dark maroon as to appear velvety black. Foliage very dark.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**CROWN PRINCE OF PRUSSIA.**— Rich, deep ruby garnet. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**SPITFIRE.**— Free-blooming, brilliant scarlet.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**NAPOLEON.**— Fine golden yellow, spotted brown.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**QUEEN VICTORIA.**— Deep orange.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c.

**MIXTURE**— Of standard varieties Lobb's climbing. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

## NASTURTIUMS—Mixed

**IVY LEAF.**— Tall Mixed — climbing habit with pointed leaves of rich ivy green veined white, resembling English Ivy. Flowers have narrow petals and are quite distinct and pleasing.

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c.

**IVY LEAF.**— Dwarf Mixed.

Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c.

**VARIEGATED.**— Tall Mixed — Foliage beautifully marked and marbled yellow and cream on the green ground, some leaves appearing almost white. Flowers come in all colors and markings.

Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c.

**VARIEGATED.**— Dwarf Mixed.

Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c.

 **OUR 64-PAGE NURSERY CATALOG** of Fruit and Ornamental Trees and Shrubs sent Free on request. Ask for it.

# PANSIES

OUR Pansy Seeds are imported direct from the leading pansy specialists of Europe and are the best selections from the new and improved standard types, being absolutely the finest seed obtainable. It was from these that our new Mastodon Strain was developed and we urge growers to take advantage of this opportunity to secure seed.

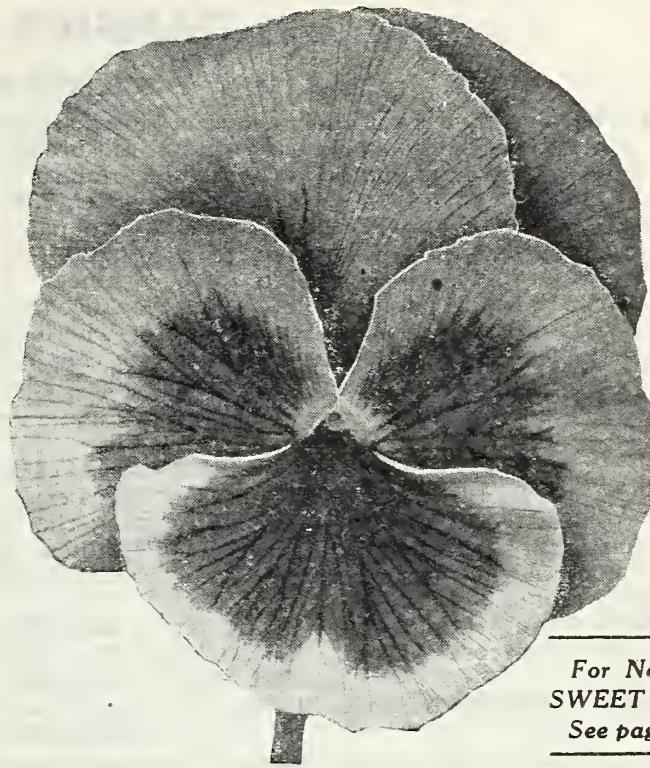
For early outdoor bedding, seed should be sown in the early Fall, in rich, moist garden soil or in cold frames. Spring sowings should be made early.

## MASTODON PANSY PLANTS

From February to June

We offer Our Famous Mastodon Pansy Plants packed in baskets of 1 doz. each.

SEE PLANT DEPARTMENT PAGE 98



For Newest  
SWEET PEAS  
See page 68

## Mastodon Pansies

FOR years the Steele Pansy Gardens have grown our Giant Pansies and co-operated in securing the finest strains from the world's most celebrated growers. These have been carefully reselected and bred up to their present surpassing excellence, and for giant size, substance, form and coloring we have never seen Pansies to compare with them. Named varieties and special strains are grown separately and the seed collected by hand and carefully blended into what we believe to be the finest mixture ever offered. This is your opportunity to secure **Mastodon Pansy Seed**, **Diamond Mixed**, and as only a small amount will be offered, you should order now.

Pkt., 25c; Trade Pkt., \$1.00.

## Our Gold Medal Collection Giant Pansies

One Pkt. each of the 10 Varieties, \$1.00.

**ADONIS.**—A distinct and beautiful shade of light blue with white center and dark blotch, a most pleasing and attractive variety. **Pkt., 10c.**

**BRIDESMAID.**—A beautiful, clear white, with shining rose colored blotch; a rare and desirable new pansy of the largest size. **Pkt., 15c.**

**FIRE KING.**—Lower petals margined white, with large magenta blotch that has a yellow margin; upper petals bright reddish bronze. **Pkt., 10c.**

**GOLDEN QUEEN.**—A rich, pure yellow of the grandest form and size. A valuable addition to the yellows, which are very hard to produce in the Giant strains. **Pkt., 10c.**

**GIANT DARK BLUE.**—A splendid blue black, very elegant, and of good substance; should be grown by everyone. **Pkt., 10c.**

**EMPEROR WILLIAM.**—A dainty cornflower blue, very showy; a splendid variety of large size and good substance. **Pkt., 10c.**

**KING OF THE BLACKS (Giant).**—Immense velvety black flowers of the finest quality; the largest and best black pansy. **Pkt., 10c.**

**TRIMARDEAU GIANTS.**—Of remarkably large size and robust growth; very fine.

**White, Yellow, Striped, Black, Blue or Mixed.**  
**Pkt., 10c; 1/4 oz., 60c; oz., \$2.00.**

**GIANT STRIPED.**—A superior strain of truly giant pansies, with the most beautiful striped markings in the richest dark shades. Very popular in Europe. **Pkt., 10c.**

**MADAME PERRET.**—A beautiful and distinct type with edges of petals frilled — bordered white, colors are dark wine — pink and red, beautifully veined. The earliest of the Giants, has sweetest perfume and keeps up its size of flower longer than any other. We offer the best strain. **Pkt., 15c.**

**RUBY KING.**—Rich shades of red, a superb variety, of fine form and substance. **Pkt., 15c.**

**SNOW FLAKE.**—A grand, pure white, of extra fine quality. **Pkt., 10c.**

**VULCAN.**—A magnificent new dark, glowing red with five large, black spots; blooms of perfect form and great substance; but its chief value lies in the superb coloring which has never been attained before. Be sure to try "Vulcan." **Pkt., 25c.**

## Popular Large Flowering Pansies

**MASTERPIECE — GIANT RUFFLED.**—The mammoth size, richness and beauty of colorings and frilled or ruffled character of the petals, make Masterpiece one of the most distinct and interesting Pansies ever developed. **Pkt., 25c.**

**PRINCE BISMARCK.**—Light brown shades, with black eye; very beautiful and distinct; true giant variety. **Pkt., 10c.**

**PRINCE HENRY.**—A new giant variety, of a brilliant, dark indigo blue, with violet luster, each petal having a large, dark brown, veined blotch. Edges of petals slightly ruffled. **Pkt., 15c.**



## PANSIES—Continued

### Fancy Strains of Mixed Pansies

**BUGNOT.**—Flowers of enormous size, blotched and veined; the shadings comprise tints of red bronze and brown not found in any other mixture.

Pkt., 25c;  $\frac{1}{8}$  oz., 75c.

**ELITE LARGE FLOWERED MIXED**—No pains are spared by our German grower to make this strain absolute perfection in form, firmness of texture, size, freedom of bloom, and elegance and variety of markings and colorings. There is no mixed Pansy seed offered superior to this.

Pkt., 25c;  $\frac{1}{8}$  oz., 75c.

**CASSIER.**—A very fine mixture; flowers large and marked with three or five blotches.

Pkt., 25c;  $\frac{1}{8}$  oz., 75c.

**ODIER OR BLOTTCHED.**—Superb, large flowers, beautifully blotched with rich and varied colors. Extra mixed.

Pkt., 25c;  $\frac{1}{8}$  oz., 75c.

**PARISIAN.**—Largest spotted, new. Very large flowering. Very handsome.

Pkt., 25c;  $\frac{1}{8}$  oz., 75c.

**FINE MIXED.**—A fine assortment of colors.

Pkt., 5c.;  $\frac{1}{4}$  oz., 25c.

### Petunia, *Hybrida*

TOO much can not be said in praise of the Petunia as a bedding plant. Our clear, bright Summers seem to bring out its best qualities. During the whole season it is covered with large, showy blossoms, which are always bright and fresh, in spite of heat and drouth. The flowers are of an almost infinite variety of colors and markings, and quite as varied in form; large and small, fringed and plain, double and single. Hardy annual. Large assortment.

**Single Fine Mixed** Pkt., 5c;  $\frac{1}{8}$  oz., 25c.

**Single Choicest Mixed.** Saved from the best flowers. Pkt., 10c;  $\frac{1}{8}$  oz., 50c.

**Single Fringed Mixed.** Large Flowered; very desirable. Pkt., 25c.

**Double Choicest Mixed.** Full and handsome.

Pkt., 25c.

**Double Fringed Mixed.** Pkt., 25c.

**GIANT CALIFORNIA**—Extra Select. Blotched and striped, fringed and ruffled. Mixed. Pkt., 25c.

### Poppy—*Papaver*

For Fine Plants and Two-Year Clumps See  
Plant Department

The poppy is well-known and really a magnificent flower which is borne separately on tall stalks. Poppies are very showy and come in many bright and charming colors. Some are hardy annuals, others are perennials, and may be sown as the ground can be prepared.

**Double Carnation Flowered.** Annual. Fringed; assorted colors. Mixed Pkt., 5c; oz., 25c.

**Shirley.** Annual. The range of color, extending from white through delicate shades of pink, rose and carmine, to the deepest crimson; fine for cutting. Best single mixed. Pkt., 10c;  $\frac{1}{8}$  oz., 25c.

### Perennial Poppies

**Bracteatum.** Hardy perennial; very showy red and mixed Pkt., 5c;  $\frac{1}{4}$  oz., 20c.

**Iceland, or Nudicaule.** These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches in height, bearing yellow, white or orange-scarlet flowers in endless profusion and most useful for cutting; hardy perennial. Mixed colors. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**Miss Sherwood.** Annual. Petals satiny white, shading to chamois rose. Very beautiful and distinct. Pkt., 10c;  $\frac{1}{2}$  oz., 25c.

**Double American Flag.** Annual. White bordered with scarlet. Pkt., 5c; oz., 30c.

**Umbrosum.** Annual. Rich vermillion, with a glossy black spot on each petal; single. Pkt., 5c; oz., 30c.

**King Edward.** A new single annual variety producing large flowers with great freedom. Color is deep scarlet, shaded crimson, red, with large black blotch. Height about 2½ ft. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**Oriental.** Hybrida mixed. Pkt., 15c;  $\frac{1}{4}$  oz., 50c.

**California Poppy.** See *Eschscholtzia*, page 60.

### Pink—*Dianthus*

The Dianthus family embraces some of the finest of all flowering plants. The blooms are of the richest and most pleasing colors, and nothing can surpass the exquisite fragrance of some varieties. They are hardy, and become perennial in warm climates.

**Chinensis.** Single mixed. Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**Chinensis.** Double mixed. Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**Hedgewigii.** Single mixed. Color varies from richest velvety crimson to delicate rose. Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**Hedgewigii.** Double mixed. Large flowering, splendid. Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Hedgewigii Diadematus Albus.** Double white. Price, Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Hedgewigii Diadematus.** Double Diadem Pink. Extra fine. Pkt., 5c;  $\frac{1}{4}$  oz., 35c.

**Hedgewigii Diadematus Fireball.** Extra double, brilliant dark scarlet. Very beautiful. Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Hedgewigii Laciniatus.** Fine single and double fringed, finest assorted colors. Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Plumarium Scoticus.** Double perennial, large flowered, mixed. Pkt., 10c; 1000 seeds, \$1.00.

### Portulaca—Rose Moss

Brilliant dwarf annuals, only six inches high, luxuriating in warm situations, and blooming profusely from early summer to autumn. For low beds and masses of color from spring until frost, they are indispensable; colors range through innumerable shades of red, yellow, pink, white, striped, etc.

**Single Mixed.** Pkt., 5c;  $\frac{1}{4}$  oz., 20c.

**Double Mixed.** Pkt., 10c; 1-16 oz., 25c.

### Phormium—New Zealand Flax

**Tenax.** Has handsome, variegated foliage. Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

### Pyrethrum

Very ornamental plants, for both foliage and flowers.

**Parthenium Aureum**, or Golden Feather, Beautiful, gold leaved, flower white. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**Selaginoides.** Fine, fern-leaved sort; flowers bright golden yellow. Pkt., 10c;  $\frac{1}{4}$  oz., 35c.

## A "CYCLE" LAWN MOWER

—cannot be bent or warped out of alignment. Cuts All the Grass Right the First Time Over. See page 80.



### Primula—Primrose

The first three varieties named below are hardy, early blooming garden plants, and the others beautiful, Winter blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a sandy loam and leaf mold.

**POLYANTHUS.**— Early blooming, dwarf growing plants. Valuable for outdoor bedding. Mixed colors. **Pkt., 10c;  $\frac{1}{8}$  oz., \$1.00.**

**VULGARIS.**— Yellow, common, English Primrose. **Pkt., 10c;  $\frac{1}{4}$  oz., \$1.00.**

**JAPONICA, OR JAPANESE PRIMROSE.**— The beautiful, large, various colored flowers stand in whorls, pyramidically arranged on short flower stems one foot high; though perennial, new plants flower more freely, and seeds should be sown every year. Mixed varieties. **Pkt., 15c;  $\frac{1}{8}$  oz., \$1.00.**

**SINENSIS, OR CHINESE PRIMROSE.**— The beautiful, large fringed flowers stand in pyramids arranged on short flower stems. Blossoms of every shade of color, from pure white to deep crimson, and even deep blue; especially fine for Winter and Spring flowers in the house; easily grown; free bloomers. Finest mixed. **Pkt., 25c; 1-32 oz., \$2.00.**

**SINENSIS.**— Pure white or red. **Pkt., 25c.**

**SINENSIS, ALBA.**— New; finest large white, with yellow eyes. **Pkt., 50c.**

**SINENSIS.**— Double finest mixed. **Pkt., 50c.**

**OBCONICA GRANDIFLORA.**— A lovely profuse bloomer, bearing beautiful single flowers. This is really an ever-blooming plant, producing elegant clusters of flowers continuously throughout the year. **Pkt., 10c; 1-16 oz., \$1.50.**

### Oenothera—Evening Primrose

The Oenothera, or Evening Primrose, produces large, showy blossoms, which are fully expanded only during the evening and early in the morning. The flowers, which are from three to four inches across, attract much attention on account of their size, beauty and the rapidity with which they open. They are constant and prolific bloomers. Fine mixed. **Pkt., 5c;  $\frac{1}{4}$  oz., 25c.**

### Rhodanthe—Swan River Everlasting

A beautiful everlasting annual for garden or pot culture; height, 1 ft.; mixed colors. **Pkt., 5c.**

### Stipa Pennata—Feather Grass

A pretty ornamental. Grown for its plumes; not so large as Pampas. **Pkt., 10c.**

### Rudbeckia.—Golden Glow

**NEWMANI.**—Brilliant Orange Yellow Petals around a large dark center. A beautiful and useful perennial for borders or as a single group. **Pkt., 15c.**

**Fulgaris.**— Orange yellow. Perennial **Pkt., 15c.**

**Laciniata.**— Fl. Pleno. Golden yellow. **Pkt. 25c.**

### Salpiglossis—Pointed Tongue

Produces very showy, funnel-shaped flowers of large size. Fine for beds. Half-hardy annuals. **FINE DWARF.**— Mixed. **Pkt., 5c;  $\frac{1}{4}$  oz., 25c.**

**GRANDIFLORA.**— Mixed. Large flowering. **Pkt., 10c;  $\frac{1}{4}$  oz., 35c.**

### Salvia—Flowering Sage

Very ornamental; flowers borne in spikes of fiery red or crimson, and continue in bloom in open ground until after severe frosts. Start in heat and transplant into light soil, one to two feet apart. Excellent for bedding in masses or single planting. Hardy annuals.

**SALVIA SPLENDENS.**— Brilliant scarlet. **Pkt., 10c;  $\frac{1}{4}$  oz., 50c.**

**SALVIA ZURICH.**— New Dwarf Early. The finest of all Dwarf Salvias. Very floriferous. **Pkt., 15c;  $\frac{1}{8}$  oz., \$1.00**

**BONFIRE.**—(Clara Bedman). One of the finest Salvias ever introduced; compact bush about two feet in height and diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark green foliage and completely cover the plant. **Pkt., 15c;  $\frac{1}{4}$  oz., \$1.00.**

### For Salvia Plants, see Plant Department.

### Stocks—Double Ten Weeks

These popular flowers are easily grown, and are so highly fragrant and of such beauty that they deserve a place in every garden. They are great improvements over the Gilliflowers of the olden times, being much larger and more densely double and of a great variety of colors.

**DWARF LARGE FLOWERING.**— White, scarlet, Rose, Light Blue, or Mixed. **Pkt., 10c;  $\frac{1}{8}$  oz., 50c.**

**EMPEROR, OR PERPETUAL.**— Mixed. **Pkt., 10c; 1-16 oz., 50c.**

### Stocks—Winter or Brompton

**BEAUTY OF NICE.**—Very large flowers of a delicate flesh pink. Extra fine. **Pkt., 15;  $\frac{1}{8}$  oz., 75c.**

**CRIMSON KING.**—Rich Blood Crimson. **Pkt. 15c.**

**MONT BLANC.**—Purest White. **Pkt., 15c.**

**MONTE CARLO.**—Canary Yellow. **Pkt., 15c.**

**QUEEN ALEXANDRA.**—Soft rosy lilac. **Pkt., 15c.**

**VIOLET.**—Mixed. **Pkt., 10c; 1-16 oz., 50c.**

### Virginian Stock

A fine, early flowering plant. Hardy annual. **MIXED.** **Pkt., 5c;  $\frac{1}{4}$  oz., 15c.**

### Saponaria

Pretty, dwarf bedding plant. Red, white and scarlet flowers. Hardy annuals.

**FINE MIXED.** **Pkt., 5c;  $\frac{1}{2}$  oz., 20c.**

### Schizanthus—Butterfly Flower

Beautiful, garden annuals, flowers charmingly fringed and delicately colored; one to two feet. **MIXED COLORS.** **Pkt., 5c;  $\frac{1}{4}$  oz., 25c.**

### Statice—Sea Lavender

Beautiful for Winter bouquets; flowers very pretty.

**ANNUAL VARIETIES.**— Mixed. **Pkt., 5c.**

**PERENNIAL VARIETIES.**— Mixed. **Pkt., 10c.**



## SWEET PEAS—Continued

### New Spencers

**A Splendid Collection, Including the Best of the Recent Novelties.**

THE new "Spencer" type has lovely waved and fluted flowers of gigantic size, and in exquisite colorings, length of stem, and lasting qualities are much superior to the older types. "Spencers," however, are very shy seeders and require much careful selection to develop fixed types. The seed is therefore scarce, and cannot be cheaply produced.

**AMERICA—Spencer.** The largest and finest of its class. Pure satiny white, striped and splashed brilliant crimson; 4 flowers of perfect form borne on long stems.

**Pkt., 10c; 1/2 oz., 20c.**

**APPLE BLOSSOM SPENCER.** A truly giant flower; color standard rose with deeper veining, wings light carmine, ground color primrose.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**ASTA OHN.** Lavender, suffused with mauve; of perfect form, largest size, 4 blossoms on long, strong stems; very vigorous.

**Pkt., 10c; 1/2 oz., 25c; oz., 45c.**

**AURORA SPENCER.** Ground color cream white, exquisitely flaked and mottled; rich orange salmon, extra large, free-blooming.

**Pkt., 10c; 1/2 oz., 20c; oz., 30c.**

**CONSTANCE OLIVER.** A clear, rich pink on cream ground; of true Spencer type; best of its color.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**COUNTESS SPENCER—Pink.** The first Sweet Pea of the Spencer type. Flowers extremely large, beautifully expanded, crumpled and waved. Color silvery white, suffused and tinted with soft shell pink, deeper at the outer edges.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**DAINTY—Spencer.** A pure, glistening white with distinct margining of bright rose pink; comes four blossoms on long stems. Dainty is all its name implies and is the best picotee edge yet produced; very large and wavy.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**"DUPLEX CREAM."** The standards are large, bold and beautifully curved. A vigorous grower and produces many fours. Color a deep rich cream.

**Per pkt., 10c.**

**FLORA NORTON.** Bright blue with just a tinge of purple, fine Spencer form.

**Pkt., 10c; 1/2 oz., 20c; oz., 30c.**

**FLORENCE NIGHTINGALE—Spencer.** Finest new lavender of immense size. Bold, erect flowers of charmingly soft, rich lavender with very delicate suffusion of rose; a beautiful, self-colored flower, frilled and waved. Bears four blooms on extra long stems.

**Pkt., 10c; 1/2 oz., 20c; oz., 30c.**

**GEO. HERBERT.** Our own select strain; a bright rosy-carmine, open form, beautifully waved; a magnificent, vigorous Sweet Pea of giant size.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**



NEW  
"DUPLEX"  
SPENCER

**JOHN INGMAN.** Rich rose crimson, large flowers of good substance.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**HELEN LEWIS.** A giant flower of perfect form; standard rich crimson orange, wings orange rose; open form, full, wavy.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**KING EDWARD SPENCER.** Bright crimson scarlet, largest size, wavy standard; drooping wings, very long stems; one of the finest bright reds.

**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**MARJORIE WILLIS.** A brilliant rose carmine of the Marie Corelli class and considered a better flower, of the finest Spencer form, the long stems carry four well-placed flowers; one of the best.

**Pkt., 10c; 1/2 oz., 30c; oz., 50c.**

**MAUDE HOLMES—Spencer.** A brilliant sun-proof crimson of the largest size. Of true Spencer form, wavy and fluted.

**Pkt., 10c; 1/2 oz., 20c; 1 oz., 35c.**

**MRS. ROUTZAHN.** Color, a soft straw tinted with blush pink, shading to apricot and rose at the edges, with a distinct rose margin; of immense size; one of the finest Spencers.

**Pkt., 10c; 1/2 oz., 25c; oz., 40c.**

#### JOIN THE OREGON SWEET PEA SOCIETY.

Cup—value \$60.00—for the best eight Spencer varieties in vases of ten or more stems each. Only amateurs who are members can compete, so every member has a chance to win. The Society's Exhibition in Portland last July was a grand success and the coming show will be one of the big events of the season. If you are a lover of Sweet Peas you should be a member of the Oregon Sweet Pea Society.

Fifty cents will pay all dues for one year.



## NEW SPENCERS — Continued

**MRS. WALTER WRIGHT.** A distinct bright shade of rosy mauve, extra large, fine flower, waved and ruffled, vigorous and free-flowering.  
**Pkt., 10c; 1/2 oz., 30c; oz., 50c.**

**OTHELLO SPENCER.** Very deep maroon of largest Spencer type; wings very wavy, large graceful flower; best of its color.  
**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**PARADISE IVORY.** A grand ivory white Spencer of the finest form. Large flower of good substance on long stems. A vigorous, tall grower.  
**Pkt., 15c; 1/2 oz., 40c; oz., 65c.**

**PRIMROSE SPENCER.** Color, a true primrose. Very vigorous, free-flowering, excels in beauty of form, length of stem and keeping qualities.  
**Pkt., 10c; 1/2 oz., 25c; oz., 45c.**

**QUEEN ALEXANDRA—Spencer.** We will all welcome Queen Alexandra in Spencer form, as there is no better bright, intense scarlet, sunproof Sweet Pea. Of large, full, waved form. Free-flowering and vigorous.  
**Pkt., 10c; 1/2 oz., 20c; oz., 35c.**

**SENATOR—Spencer.** Of finest Spencer form and largest size. The coloring is a combination of deep claret and chocolate, striped and flaked on a light heliotrope ground. The coloring, though dark, is brilliant and attractive. A free-flowering, vigorous grower of greatest merit.

**Pkt., 10c; 1/2 oz., 20c; oz., 30c.**

**THOMAS STEVENSON.** The most brilliant orange scarlet, standard of deeper color than the wings. The flowers are of the finest Spencer form and generally come four to the stem.  
**Pkt. 20 seeds, 10c; 1/2 oz., 40c; oz., 75c.**

**VERMILION BRILLIANT.** An intense pure scarlet self-color of rare beauty and substance. Absolutely sunproof. **Vermilion Brilliant** is the finest flower of its color. A stocky, vigorous, grower, profuse bloomer, the long, strong stems carry four perfect flowers. **Pkt., 15c; 1/2 oz., 75c.**

**WHITE SPENCER.** A pure white flower of enormous size, beautifully crinkled and fluted, of splendid substance  
**Pkt., 10c; 1/2 oz., 25c; oz., 45c**

## “UNWINS”—Splendid New Sweet Peas in This Popular Class.

THE “UNWINS” resemble the Spencer type, although being of entirely different origin. They are not quite so large as the Spencers, but of fine form and substance, very vigorous and free-flowering, and always come true. In this respect they are superior and more dependable than Spencers, which often “sport” in the most unaccountable manner. For substance, color and bloom, Unwins are unsurpassed.

**PRICE, except where noted, Pkt., 5c; oz., 25c; 1/4 lb., 75c.**

**CHRISSEY UNWIN.** Beautiful cherry scarlet, self-color, wavy, standard finest form.

**E. J. CASTLE—Crimson Rose.** A magnificent open form flower of grandest size and unique coloring, being a rose crimson veined deeper rose, its brilliancy being enhanced by artificial light; fluted border.

**FRANK DOLBY.** Color, delicate light lavender of great beauty, bold, wavy standard with widely spreading fluted wings.

**GLADYS UNWIN—Light Pink.** A large, bold flower, not hooded, but with standard and broad wings, of the new orchid-flower type, this is similar to Countess Spencer, but several shades lighter in its lovely pink color.

**NORA UNWIN—White.** A grand pure white of the same beauty of form, waved and fluted standard and wings as Gladys Unwin. Award of merit at the trials of the N. S. P. S., Reading, England, one of the finest whites.

**PHYLLIS UNWIN—Deep Rose.** The largest of the Unwin types, beautifully waved and crinkled, standard upright, wings broad. Flowers 3 to 4 on long stems. Color, a rare shade of deep rose, self-color.

**PRINCE OLAF.** A fine new Unwin of largest size. Flaked and striped, blue on a white ground.

**ST. GEORGE.** Brilliant orange standard, the large wings a distinct orange carmine; does not burn in the sun; one of the best orange shades.

## GRANDIFLORA TYPE

### Select List of Finest Large Flowering Sweet Peas, the Best of Their Color and Type

Prices, unless otherwise stated, 5c per Pkt. 15c per oz.; 40c per 1/4 lb.; \$1.25 per lb. postpaid

#### Pink and White

**Blanche Ferry.** Standard wide and erect, bright rose pink, wings are creamy white, tinted with rose.

#### Red, Scarlet and Maroon

**QUEEN ALEXANDRA.** An intense bright scarlet of grand substance; a bold, robust flower of giant size and finest form, is sunproof, very vigorous and free-flowering.

**KING EDWARD VII.** A lovely, intense crimson. A truly giant flowered variety. The finest crimson to date. Strong stems and growth.

**PRINCE OF WALES.** Rose crimson. Fine sort.

**BLACK KNIGHT.** Large size; a rich, dark claret, almost black; somewhat veined.

#### White

**DOROTHY ECKFORD.** Pronounced by Sweet Pea experts to be the grandest pure white yet seen of the grandiflora type. Grows an enormous mass of bloom.

#### Blue and White

**HELEN PIERCE.** The most beautiful bright shade of true blue mottled on a brilliant pure white ground; 3 or 4 blossoms on a long stem. A grand flower of the largest size; very free and vigorous.

**1/4 lb. 50c.**

**LOTTIE ECKFORD.** Flowers beautifully shaded with light blue on a white ground and boldly edged deep, rich violet; very dainty.



## Finest Large Flowering Sweet Peas—Continued

### Pink—Deep Shades

**JANET SCOTT.** A large, grand flower; deep, rich pink.

### Pink—Light Shades

**DAINTY.** Large flowers, white with pink edge.

**LOVELY.** The most beautiful shades of soft shell-pink, changing to very light rose at the outer edges. Grand flowers of large size.

**PRIMA DONNA.** A most beautiful bright shade of blush-pink. Flowers of a large size, and finest form.

### Cream or Light Yellow

**GOLDEN-ROSE.** The large flowers are of fine open form, with standard gracefully fluted. A clear crimson yellow, beautifully flushed with rosy pink.

**HON. MRS. E. KENYON.** Rich, primrose. A bold, giant flower. The best in this shade.

**SYBIL ECKFORD.** A unique shade of apricot-lemon, one of the finest Eckfords.

**MRS. COLLIER.** A true primrose of fine form.

### Double Sweet Peas

**MIXED.** These have two or three standards and frequently three wings. The petals are beautifully incurved and frilled.

Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb. 50c; lb., \$1.00

## Sweet Peas in Mixture

### Diamond Mixture

This is the most perfect blend of the finest named varieties it is possible to produce. As formerly, this mixture will contain the novelties of the preceding season, and the addition of the rare Spencer types will make this the grandest mixture of new, large-flowering Sweet Peas we have ever offered. It will delight the most critical; if you are undecided as to the varieties or colors you want, buy the "Diamond Mixture."

Sold in 1-oz. sealed pkts. only, at 15c each; 2 for 25c; 12 for \$1.25. Not sold in bulk.

### Our Superb Mixture—True Spencers Only

A splendid mixture, carefully proportioned and blended to produce pleasing and harmonious combinations of color, containing the most beautiful shades and variations of the wonderful Spencer type. **These are not seedlings, but carefully selected named varieties that retain all their purity and brilliancy of color.**

### Perennial Peas

#### Or Lathyrus Latifolius

In general appearance these are the same as Sweet Peas, but the flowers are not so fragrant, they bloom through a long season, are perfectly hardy and will live for years.

**Red, White, Pink or Mixed.** Pkt., 10c; oz., 35c.

## Sweet Peas—Christmas Flowering

FOR Winter flowers under glass, sow as early as August and in succession as desired. They grow 4 to 5 feet high and will bloom in 60 to 90 days. — Give carnation temperature.

**PINK BEAUTY.** Deep rose pink.

Pkt., 10c; oz., 25c.

**CHRISTMAS PINK.** Pink and white.

Pkt., 10c; oz., 25c.

**WALLACEA.** New, lavender.

Pkt., 10c; oz., 25c.

**MRS. GEO. LEWIS.** White.

Pkt., 10c; oz., 25c

### "DIAMOND QUALITY" PRIZE WINNERS

Gentlemen: This year I planted what you call your Diamond collection of Sweet Peas. They are very fine. Last year I took second prize at the Bend Flower Show and this year I believe I will take first prize. People always remark on the splendid appearance of my Sweet Peas.

MRS. W. VINYARD.

The Sweet Peas Seed we got from you in the spring was the most satisfactory we ever planted—**Senator, Wedgewood, Margaret Atlee and Illuminator** are simply great.

MANN GREENHOUSES.

Gentlemen: Are mailing you pictures of Sweet Peas grown from your Spencer Sweet Pea seed. They were not planted until May 1st on account of our late Spring, and were raised from last year's seed purchased from you which I had left over. They are nine feet high and covered with bloom. MRS. L. W. DRAID.

Gentlemen: I had splendid success this year with the Sweet Peas and Nasturtiums which I ordered from you. My Sweet Peas were the handsomest in Central Oregon and I have picked blooms by the arm load.

MRS. H. H. PALMER.

**1915 National Dahlia Show** will be held in Portland next September. Help make this show a big success. Premium lists on request. See page 88.

**Scabiosa****Sweet Scabious, or Mourning Bride.**

Free-flowering annuals; colors, white, carmine, lilac, maroon, etc. Very effective for garden decoration and valuable for cutting.

**Dwarf or Tall Double Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**Smilax****Medeola Asparagoides.**

Charming, tender, perennial climber for greenhouse or window gardens. The foliage and stems are of pleasing light green; very graceful; excellent for decoration. (See Plants). Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**Snapdragon—Antirrhinum**

One of the most useful and showy of border plants of almost every color, and striped as beautifully as Carnations. They have recently been much improved and are now really magnificent. Hardy perennial.

**Grandiflora—Tall Three Splendid Novelties.****Firefly.** Scarlet and white.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Queen Victoria.** New large; pure white.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Venus.** Pink, on white ground; white throat.

Pkt., 25c;  $\frac{1}{8}$  oz., \$1.00

**Othello.** Rich dark maroon, having a satin-like sheen instead of velvety surface as most varieties.

Pkt., 25c;  $\frac{1}{8}$  oz., \$1.50

**Luteum.** Yellow.

Pkt., 25c;  $\frac{1}{8}$  oz., \$1.50

**Tall, Finest Mixed.**

Pkt., 10c;  $\frac{1}{4}$  oz., 25c

**Dwarf, Finest Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz., 25c

**Sunflower—Helianthus**

Stately growing annuals with immense golden yellow flowers; effective for garden decoration.

**Double Dwarf.** Covered with three-inch double flowers of brightest golden yellow.

Pkt., 5c; oz., 25c.

**Globosus Fistulosus.** Saffron, very large, double and handsome.

Pkt., 5c; oz., 25c.

**Multiflora.** Beautiful, double yellow flowers.

Pkt., 5c; oz., 25c.

**Mammoth Russian.** (See Field Seeds) Pkt. 5c.

**Sweet Rocket—Hesperis**

An old hardy, garden favorite. Fragrant white flowers; 2 to 3 feet. Pkt., 5c;  $\frac{1}{4}$  oz., 15c.

**Sweet Sultan**—See *Centaurea*,

**Sweet William—Dianthus Barbatus**

A well-known, remarkably free-flowering plant of brilliant colors, ranging from snow white to darkest crimson and purple. They emit a very delicate and refreshing fragrance. Hardy perennial.

**Single Mixed.** Very beautiful.

Pkt., 5c;  $\frac{1}{2}$  oz., 25c.

**Dunnettii.** Dark crimson, single.

Pkt., 5c;  $\frac{1}{2}$  oz., 30c.

**Pure White.** Single.

Pkt., 5c;  $\frac{1}{2}$  oz., 30c.

**Double Mixed.**

Pkt., 10c;  $\frac{1}{2}$  oz., 50c.

**Thunbergia—Black Eyed Susan**

Rapid-growing annual climbers; splendid for trailing over trellises, fences, etc., beautiful flowers borne in profusion; buff, white, orange, etc., four to six feet high.

**Mixed Colors.**

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**Tritoma**

Sometimes called Red Hot Poker. This is a fine handsome plant. It is hardy, though requiring some protection through the winter. The flowers are produced in large spikes of brilliant rich colors. Cut flowers keep a long time. Half-hardy perennial.

**Uvaria.** Dazzling orange red.

Pkt., 15c.

**Vinca—Old Maid**

Tender perennial. Fine for pot culture. Flowers white and pink.

**Mixed.**

Pkt., 10c;  $\frac{1}{4}$  oz., 30c.

**Verbena**

Very few annuals will make such a gorgeous display during the summer months, or furnish more flowers for cutting, than the Verbena. Start seed in the house or under glass early in the spring and transplant after three or four inches of growth. They flower in July and continue strong and healthy until destroyed by frost.

**Hybrida Cholcest Mixed.** Very finest.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Mammoth Mixed.** Selected; extra large, fine.

Pkt., 15c;  $\frac{1}{4}$  oz., 75c.

**Fine Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz., 35c.

**Candidissima.** Pure white.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Scarlet Defiance.** Fiery Scarlet.

Pkt., 10c;  $\frac{1}{8}$  oz., 50c.

**Pink Shades.**

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Coerulea.** Bright Blue.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Lemon Verbena**

Every garden should have a few plants of this fragrant favorite. Its pale green foliage goes well with any flower.

Pkt., 10c.

**Violet**

**Viola Odorata** is the well-known English Violet, a free-flowering, hardy perennial. Easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded moist places.

**The Czar.** Finest forcing Violet. Very large. Dark blue.

Pkt., 15c;  $\frac{1}{8}$  oz., \$1.00.

**Odorata Blue.** Very fragrant.

Pkt., 10c;  $\frac{1}{8}$  oz., 50c.

**Odorata White.** Very fragrant.

Pkt., 10c;  $\frac{1}{8}$  oz., 50c.

**Odorata.** Finest Mixed.

Pkt., 10c;  $\frac{1}{8}$  oz., 75c.

**Valeriana—Garden Heliotrope**

Fine border plants; sweet scented flowers.

**Fine Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz. 20c.

**Viscaria—Rose of Heaven**

Their profuseness of bloom will always rank them among general favorites.

**Fine Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz. 15c.

**Wall Flower—Cheiranthus Cheri**

Produces spikes of beautiful, exceedingly fragrant flowers. Half hardy perennials.

**Cloth of Gold.** Large, fine, single.

Pkt., 10c;  $\frac{1}{4}$  oz., 35c.

**Goliath.** Single, extra large, fine dark brown, very early; fine for forcing.

Pkt., 10c;  $\frac{1}{4}$  oz., 50c.

**Mixed, Single.** Large flowering.

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**Parisian Forcing.** Single.

Pkt., 10c;  $\frac{1}{4}$  oz., 25c.

**Finest Double Mixed.** Branching.

Pkt., 10c;  $\frac{1}{4}$  oz., 75c.

**Zea—Ornamental Maize**

**Japonica Variegata.** Finest Mixed. All varieties.

Pkt., 5c; oz., 20c.

**Gracillima Mixed.**

Pkt., 5c; oz., 20c.

**Zinnia Elegans**

**Youth and Old Age.**

Of the easiest cultivation and should be in every collection. Half hardy annuals.

**Tall Double Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**Dwarf Double Mixed.**

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

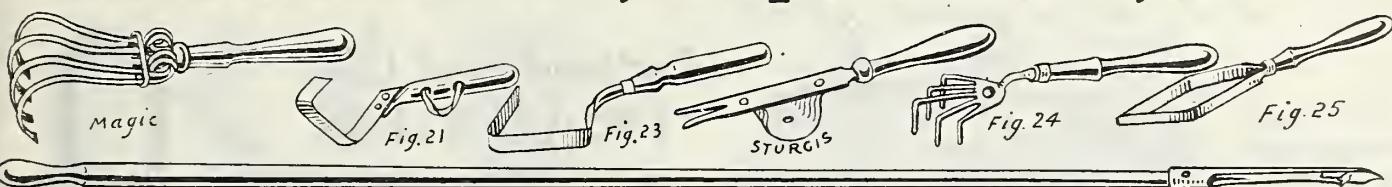
**Dwarf Scarlet.**

Pkt., 5c;  $\frac{1}{4}$  oz., 25c.

**Crispa, Crested Mixed.**

Pkt., 10c;  $\frac{1}{4}$  oz., 35c.

## Garden Tools, Implements, Etc.



Halls Dandelion Puller

## Five of the Best Hand Weeders

**Magic Weeders.** Made of best quality hard steel wire, an ideal tool for fining the surface soil. We offer three sizes:

**Magic No. 0,** 3 tines, short handle, wt. 1 lb. .... **15c**

**Magic No. 1,** 4 tines, short handle, wt. 1 lb. .... **25c**

**Magic No. 5,** long handle, 4 tines, wt. 3 lbs. .... **60c**

NORCROSS ADJUSTABLE CULTIVATOR-HOE



Detachable clamp to use on Wheel hoe, 10c extra.

Like a human hand the fingers of the "Norcross" work closely around the plants without injury. Keeps down weeds, saves moisture, leaves the ground level.

**PRICES.**—Five prong for regular garden work; 4-ft., weight 4 lbs., \$1.20; 3 prong, lighter in weight, for narrow rows and close work, 4-ft., weight, 3 lbs., 85c; 3 prong "midget," 9-inch handle for flowers or close hand work, weight, 1 lb., each, 40c.

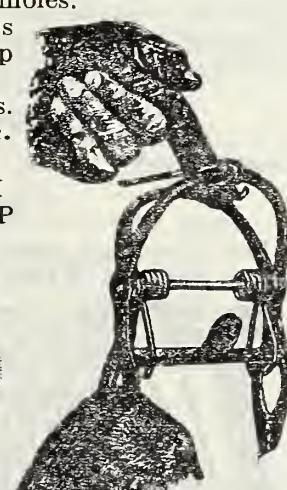
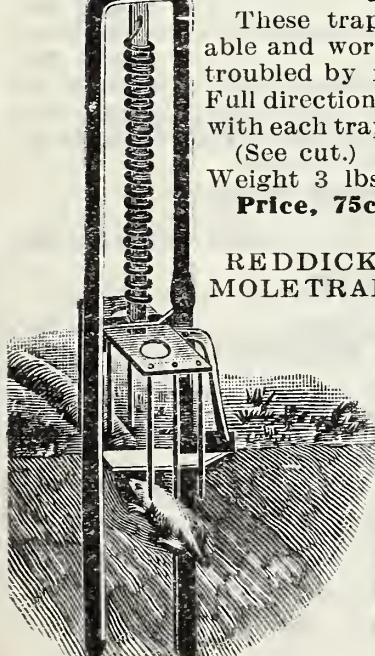
## Reddick Mole Trap

## No Mole Can Pass Under it and Live.

These traps are strong and durable and worth the price to anyone troubled by moles.

Full directions with each trap  
(See cut.)  
Weight 3 lbs.  
Price, 75c.

REDDICK MOLE TRAP



OUT O'SIGHT MOLE TRAP

**OUT O'SIGHT MOLE TRAP.**—Weight, 2 lbs. One of the best—Sure to "get them." Price, 75c.

## Whitney Rodent Torch

**WHITNEY RODENT TORCH.**—Exploded in the runway the poisonous gases penetrate all parts and suffocate the animal—specially effective against moles—express or freight (cannot be mailed); pkg. of 25, weight, 1 lb. Price 60c.

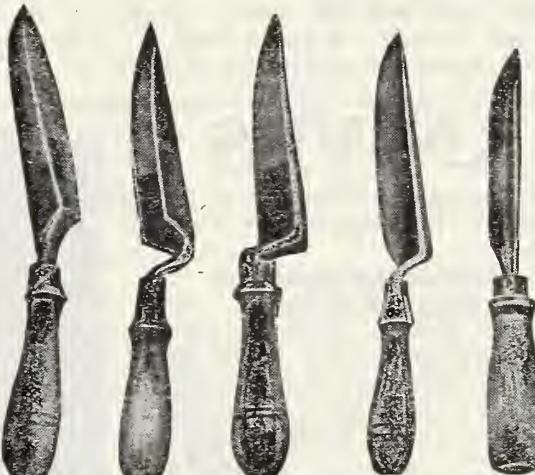
**GOPHER TRAP.—California Box.** Similar to "Out O'Sight," except this trap has sides boxed up; never fails. weight, 1 lb. Price, each, 25c.

Fig. 21. **Lang's.** Weight, 1 lb. .... **25c.**  
Fig. 23. **Hazeltine's.** Weight, 1 lb. .... **30c.**  
Fig. 24. **Excelsior.** Weight, 1 lb. .... **20c.**  
Fig. 25. **Noyes'.** Weight, 1 lb. .... **25c.**

## Dandelion Pullers

**Sturgis** (see cut). A most convenient tool for digging these troublesome weeds. Wt. 1 lb. Each **35c**

**Halls.** (see cut). Pulls the root without tearing up the lawn; long handle; polished steel blade. Wt. 2 lb. Price. .... **50c**



No. 212 No 211 No. 214 No. 213 No. 217

## Garden Trowels

See descriptions of numbers on cuts.

Don't class these tools with the cheap stock offered by the department stores. (See cut.)

**No. 211.** Six inch; blade and shank of one piece of forged steel. The best tool of its kind in the market. Weight 1 lb. **50c.**

**No. 213.** Six inch; good steel trowel, with malleable iron shank, firmly riveted. weight 1 lb. **15c.**

**No. 214.** Six inch; steel trowel, stronger and better finished than the above. weight 1 lb. **25c.**

**No. 212.** Six inch; solid steel; a first-class trowel. weight 1 lb. **35c.**

**No. 217.** Six inch steel transplanting trowel. Weight 1 lb. **20c.**

**No. 217.** Eight inch; steel transplanting trowel. Weight, 1 lb. **25c.**

**No. 217A.** Transplanting hoe trowel, used by gardeners in setting out plants. Wt. 1 lb. **50c.**

**No. 216.** Ladies' flower trowel. wt. 1 lb. **10c.**

**No. 216A.** Special Bulb Trowel. Wt. 1 lb. **75c.**



## The Official Rat Trap

The Government selected this trap from among thousands of models submitted. Spring releases with either upward or downward pressure—**Rats Nibble Upward.** The "Official" always gets them.

**Official Rat Trap.** weight 1 lb., Each, 20c.

**Official Mouse Trap.** weight 4 oz., Each, 5c.



# Garden Tools, Implements, etc.—Cont.

"Gopher-Go"  
Never Fails—  
TRY IT



## Machine Poisoned Raisins and Grain.

Sure death to Gophers, Squirrels, Prairie Dogs, Rabbits, Rats, Mice and all Rodents. An attractive bait, thoroughly poisoned. Ready to use, easily placed and sure to kill.

**Price, put up in tins.** Weight 1 lb. **25c**; Wt. 2 lbs. **50c**; Wt. 4 lbs. **\$1.00**; Wt. 10 lbs. **\$3.00**. Above weights are packed for mailing.

# KNIVES

Will send any of the following knives postpaid at these prices. See numbers on cut.

## Budding Knives

Prices Postpaid.

**No. 8.** Ebony handle, stationary ivory bark opener. **Price, \$1.00.**

**No. 8 1/2.** Same as above, only size larger. **Price, \$1.25.**

**No. 10.** Ivory handle very light and fine. **Price, \$1.00.**

**No. 10 1/2.** Same as above, only size larger. **Price, \$1.25.**

**No. 12.** Brown handle; very light and fine. **Price, 85c.**

**No. 13.** Plain wood handle, stationary blade. **25c.**

**No. 5.** Budding and pruning knife combined. **Price, \$1.00.**

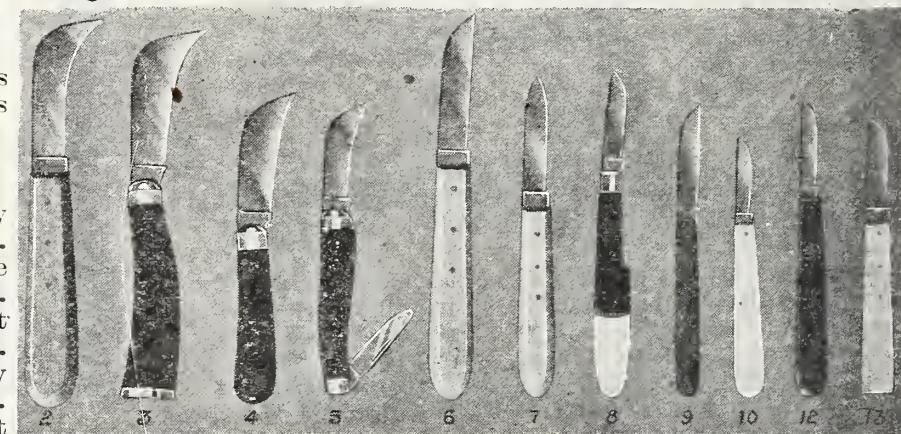
## Pruning Knives

**Note.**— See numbers in descriptions.

**No. 2.** Plain wood handle, stationary blade. **Price, 50c.**

**No. 3.** Large horn handle, very strong. **Price, \$1.50.**

**No. 4.** Polished wood handle. **Price, 80c.**



## Pruning Saws

Add 10c Each for Postage.

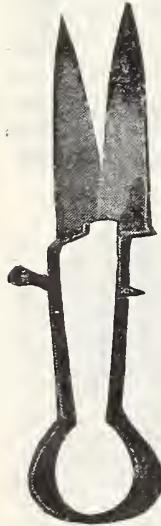
**Crescent, 12-inch blade**..... **65c.**

**Crescent, 14-inch blade**..... **75c.**

**Straight blade, 16-inch**..... **60c.**

**Straight blade, 18-inch**..... **65c.**

**Straight blade, 20-inch**..... **70c.**



## Grass Hooks or Sickles

These are the latest style and shape.

**Clark.** First-class, detachable blade. Weight,  $\frac{3}{4}$  lb. **Price, 45c.**

**Village Blacksmith.** No. 2. Hand forged, weight,  $\frac{1}{2}$  lb. **Price, 50c.**

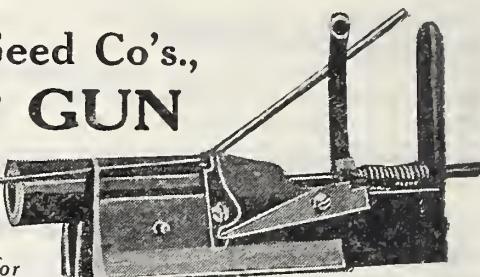
**Village Blacksmith.** No. 3. Weight,  $\frac{1}{2}$  lb. **60c.**

## Grass Shears

Fine for trimming borders and edges, good make; 6-in. blade. (See cut, Fig. 28.) Weight,  $\frac{3}{4}$  lb. **Each, 60c.**

**GRASS SHEARS. "Keen Kutter"**  
Best made. Weight 1 lb. **Price, \$1.00.**

## Portland Seed Co's., TRAP GUN



A "Sure Cure" for  
Moles and Gophers.

Breech loader, 16 gauge; can be set for coyotes coons, hawks, etc., and is the most effective way of getting moles and gophers. Safe, simple, durable. Wt. 4 lbs.

**PRICE, Post paid to any address. . . . \$1.75**  
**READ!**

*Mr. Chas. H. Davidson writes:— Those 3 Coyote guns are all O. K. I got 9 Coyotes, 1 Fox, 2 Bob Cats, 1 Cougar, 3 Dogs and gadd only knows how many Magpies that got blown to atoms by pecking the baites on these guns.*

## Grafting Knives

**No. 6.** Plain wood handle, stationary blade. **Price, 35c.**

**No. 7.** Plain wood handle, stationary blade; smaller. **Price, 25c.**

**No. 9.** Special Henckels Grafting Knife — has extra heavy brass lining, brass rivets, blade set deep in handle, giving great strength. **Price, each, \$1.00.**

## Grafting Wax

**Lion Brand** **1/4-lb., 10c; 1/2-lb., 20c; 1b., 35c.**

## Raffia

For tying plants and buds.

**For colored Raffia See Page 127.**

**Lb., 25c.**



## Long Handle Tree Pruners

**Indispensable in  
Pruning Tall Trees.  
(See Cut.)**

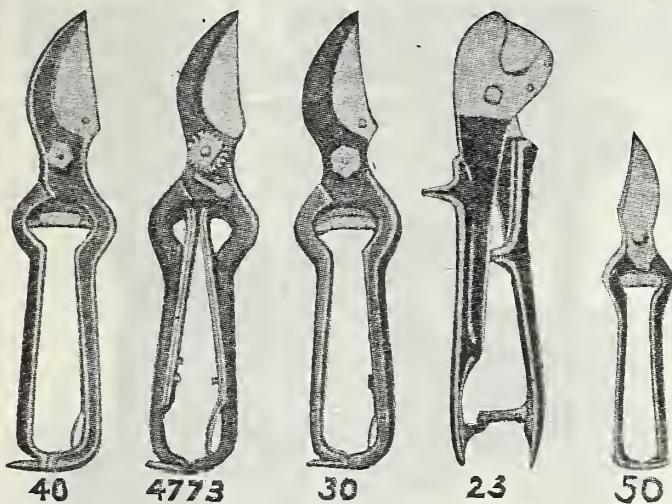
**6 feet, 75c;  
8 feet, 90c;  
10 feet, \$1.00;  
12 feet, \$1.15.**

**Extra Blades 15c each.**

## FLORISTS

We carry a large stock of up-to-date Supplies—the very best lines—and your orders or inquiries will have prompt attention. We can save you money and give you prompt service. **WRITE OR WIRE.**

## Garden Tools, Implements, Etc.---Cont.



**No. 50.** 5  $\frac{1}{2}$ -inch, nickle-plated; small, but of best material; fine for ladies. Weight, 1 lb. **Price, \$1.00.**

**No. 23.** Levin Pruner, 7-in.; cuts clean; cuts  $\frac{1}{2}$  inch. Weight, 1 lb. **Postpaid, 60c.**



Detroit

## Flower Shears

Nickle-plated; with springs; cuts and holds the flower from falling until opened again.

**Postpaid, \$1.25.**

## Grape Shears

Holds fruit or plant until released.

**Postpaid, \$1.00.**

## New DETROIT Tree Pruner

The powerful leverage and improved construction make the "Detroit" a reliable and satisfactory tool. The material is first class throughout and will stand hard service.

**Prices, 6 ft., \$1.65; 8 ft., \$2.00  
10 ft., \$2.25.**

**NOTE.— Compare numbers on cut to those in descriptions.**

**No. 4773.** 9-inch; full polish, with double brass springs; best American make. Weight, 1 lb.

**Price, \$1.50.**

**No. 40.** 9-inch; bright finished, polished blade, spiral steel spring; made for hard service. Weight 1 lb.

**Price, \$1.00.**

**No. 41.** Same as No. 40, except with ratchet nut. Weight 1 lb.

**Price, \$1.25.**

**No. 30.** 7-inch; German make; black finish; polished blade; very good. Weight, 1 lb.

**Price, 75c.**

**No. 31.** Same as No. 30, only 9-inch ratchet nut; an American make. Wt. 1 lb. **Price, \$1.00.**

**No. 59. Thinning Shears.** Weight, 1 lb.

**Price, 35c**

**No. 51.** Same as No. 50, except that it is 6  $\frac{1}{2}$  inches long. Weight, 1 lb. **Price, \$1.25.**

## Branch Shears

**Fig. 126.** This has no equal in its class; is forged from high-grade tool steel; finely tempered, solid wrought steel ferrules. Patent lock nut. Cannot work loose and ruin shears. 26-inch handle. Weight 4 lbs. **Price, \$1.75.**

**Fig. 35.** Standard pattern. Satisfactory for light work; a good value.

**26-inch handle, weight, 2  $\frac{1}{2}$  lbs., 75c.; 41-inch handle, weight, 3 lbs., 90c.**

## Orchard King

## Improved Branch Shears

The "Orchard King" is made of the finest material, has heavy ferrules and the powerful compound lever makes cutting of heavy 36-inch hardwood handles. **Price, \$3.00.**

branches easy work.  
Wt. 5 lbs.

## Miscellaneous Florists' and Nurserymen's Supplies

## Wooden Labels

## Tree Labels

Painted iron wire. **Per 100, 15c; per 1000, 95c.**  
Unpainted iron wire. **Per 100, 15c; per 1000, 85c.**  
Painted copper wire.

**Per 100, 20c; per 1000, \$1.20.**

Unpainted copper wire. **Per 100, 20c; per 1000, \$1.05.** Wt. pckd., 4 lbs. per 1000.

## Pot Labels

4-inch. Plain, per 100, 15c; 1000, 70c;  
Painted, 1000, 85c. Wt. pckd., 4 lbs per 1000.  
5-inch. Plain, per 100, 20c; 1000, 85c;  
Painted, 1000, \$1.05. Wt. pckd., 6 lbs. per 1000.  
6-inch. Plain, per 100, 20c; 1000, \$1.25;  
Painted, 1000, \$1.45. Wt. pckd., 9 lbs. per 1000.  
8-inch. Plain, per 100, 30c; 1000, \$1.50;  
Painted, 1000, \$1.80. Wt. pckd., 11 lbs. per 1000.

## Tin Foil

Florist. Regular stock.

**Per lb., 15c.**

## Glazing Points

**Peerless.**—Best point made. No raising up when driven — no rights, no lefts, no sliding, no trouble to apply; cheap, indestructible. Once used always used. 1000 in box. Wt. 2 lbs.

**Price, 75c.**

## Putty Bulbs

Very convenient for applying liquid putty in glazing greenhouses. Wt. 1 lb. **Price, \$1.00.**

**For Glazing New or Old Greenhouses.**  
The use of "Mastica" avoids the necessity of repeatedly reglazing the houses, saving much time and expense. With "Mastica" you can bed in, or use outside with machine. Broken glass can be easily removed and replaced by new without breakage of other glass, which usually occurs with hard putty. One gallon will cover about 290 running feet (one side). Wt. 17 lbs. pckd.

**Price, per gallon, \$1.50.**

**Mastica Glazing Machine.**—"Mastica" is forced through the opening at the heel, and is smoothed into perfect condition by the foot passing over it. Wt. 2 lbs.

**Price, \$1.50.**

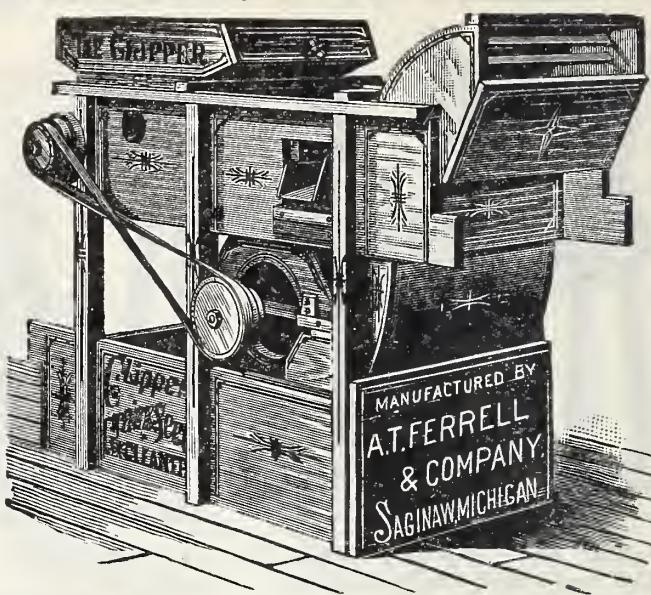


## The Clipper Grain, Seed and Bean Cleaner

This is without doubt the best seed and grain cleaner on the market today. When it comes to doing real nice, clean work, it is far ahead of all the others. The "Clipper" is especially adapted for making effectual separation of wild oats, cheat, cockle and all foreign seed from wheat and oats, plantain from clover, etc., etc., as well as cleaning and grading the perfect seed. Other manufacturers depend entirely upon screens for this work and with unsatisfactory results. The "Clipper" however, screens all straw and foreign matter from the grain before it enters the air shaft, and the "Vertical Blast" does the rest. The screens are so arranged as to be in plain view, and of easy access to the operator while machine is in operation. Seed dealers every where use the "Clipper," because it is the best. We buy these cleaners in carload lots and have both hand and power mills. **Descriptive pamphlet and catalog sent on request.**

**Price: No. 1-B, new style, \$26.00; No. 2, \$35.00.**

We have four Clipper Cleaners in use in our warehouse, because they are the best cleaners made and the only ones that will clean and grade all kinds of grass, vegetables or farm seeds.



**Clipper** We have supplied "Clipper Cleaners" to the mills, dealers and prominent growers of the Northwest. If you grow grain or seed and do not own a "Clipper," you are losing many times its cost every year. Let us send you our "Clipper" Catalog. All sizes and prices.

## Broadcast Seed Sowers

### Little Giant

The best cheap seeder on the market, made in three sizes.

No. 3 Improved, weight 4 lbs.....	<b>\$2.25</b>
No. 3 weight 4 lbs.....	<b>2.00</b>
No. 4 weight 3 lbs.....	<b>1.65</b>

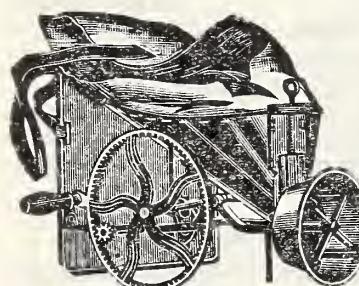
### Tin Horn Seeder

Adjustable. A good serviceable seeder at a very low price. Weight 1 lbs. **Each, 90c**

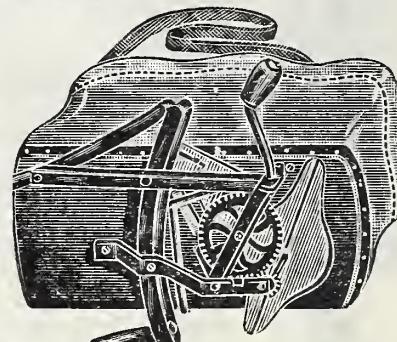
### Cahoon

The standard broadcast seed sower of the world, made of steel, iron and brass and with ordinary care will last a lifetime. This is the most popular and best built seed sower; has a force feed and does excellent work. Instructions with each machine. Weight 9 lbs.

**Price, \$3.50.**



CAHOON



LITTLE GIANT

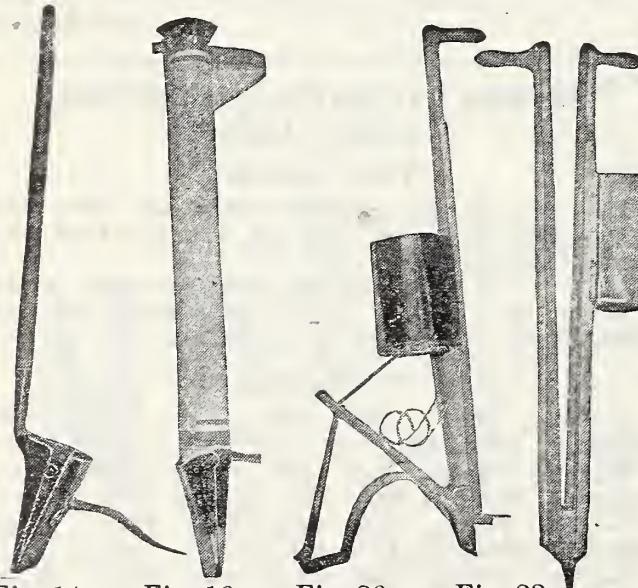


Fig. 14 Fig. 16

Fig. 20 Fig. 22

## Corn Planters

### GORDON AUTOMATIC--One hand. (Fig. 20.)

Puts the right number of kernels just where you want them, and at the proper depth. Is light, easily worked, requiring only one hand, either right or left. Is strong and durable. Wt. pkd. 6 lbs. **Price \$1.75.**

**ACME. (Fig. 22.)** A two hand planter. Light, well made and especially adapted to heavy, cloddy or stony soils. Adjustable—from pop corn to large kidney beans. Has spring brass cut-off and steel blades. Wt. pkd. 4 lbs. **Price \$1.00.**

## Hand Planters

### Potato Planters

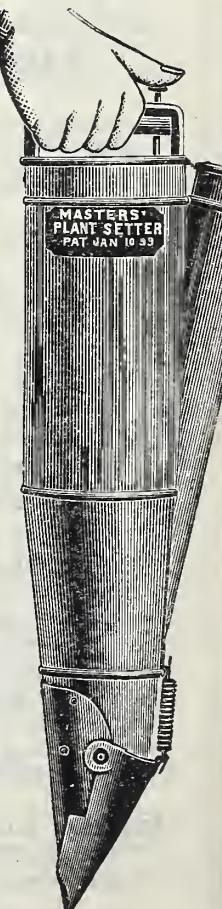
#### PEERLESS. Tubular. (Fig. 16.)

This light tubular planter locks itself as it is lifted out of the ground and the next potato may be dropped in at once. Opens automatically by forward movement. Wt. pkd. 5 lbs. **Price \$1.50.**

#### PINGREE or ACME. (Fig. 14.)

Similar in action to the tubular. You lift the planter up to drop in the potato. A strong, light and serviceable planter. Wt. pkd. 4 lbs.

**Price \$1.00.**



## Masters Plant Setter

With a "Masters" you can set, water and fertilize 10,000 plants a day and do better work and your plants will make a more thrifty growth than if set by hand. Sets the plant firm, puts the water in the right place, works as fast as you walk. Sets cabbage, kale, celery, tomatoes and vegetable plants of all kinds. Wt. pkd. 5 lbs. **Price, each, \$4.50.**

# Planet Jr. Garden Tools

FOR over 40 years Planet Jr. Garden Tools have stood the test of world-wide usage, and are recognized in every known country as the highest type of garden implement. In Europe where labor is cheapest, Planet Jrs. are in constant use. How, then, can you afford to be without them where labor is both high and scarce? We cannot tell you all about Planet Jrs. in this catalog, but will send you the beautiful 72-page Planet Jr. book on request.

Being general selling agents for Planet Jr. implements, our stocks are large and orders will have prompt attention. State your requirements. We will advise the correct tool.

## Three New PLANET JRS.

**No. 28.** The New Combined Hill and Drill Seeder and Wheel Hoe. The most accurate and perfect of all Planet Jrs.; the culmination of their 40 years experience. Seeding device is of a special metal and the improved method of delivery gives a narrow straight and even row that can be cultivated easily with the wheel hoe. The control enables you to make the most perfect and finest adjustment for feeding. See Planet Jr. Catalog.

Packed, wt. 71 lbs. Price.....\$16.50

**No. 29.** This is the Hill and Drill Seeder only; the No. 28 without cultivating attachments. Packed, wt. 57 lbs. Price.....\$12.50

**No. 30.** The New Single Wheel Hoe. Part of the No. 28 combined seeder and wheel hoe. Complete with attachments, as illustrated. Weight packed 42 lbs. Price.....\$9.00

**No. 6 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow**

**What it Will Do.**—It drops all garden seeds in hills and sows in drills, with the greatest regularity, in a narrow line, to any exact depth required, covers, rolls down and marks the next row, all at one passage. As a wheel hoe, it hoes, cultivates and plows all garden crops, completing a row at every passage, up to 16 inches in width. **Price, Complete, \$14.50** Weight, packed, 64 lbs. **As a Seeder Only, \$12.00** **As a Wheel Hoe only (No. 36) \$7.00**

**No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow,**

This tool combines in a single convenient implement a capital hill-dropping seeder, a continuous row-seeder, single wheel hoe cultivator and garden plow. **No. 4 Price, Complete, \$12.00** Weight, 53 lbs. **As a Seeder Only, \$10.00** **Holds 2 1/2 Quarts of Seed.**

A set of three rakes supplied when specially ordered. **Price, extra, \$1.50.**

**No. 25 Planet Jr. Combined Hill and Drill Seeder and Double Wheel Hoe, Cultivator and Plow.** For Market Gardeners, larger capacity than No. 4. Steel Frame. **Holds 2 1/2 Quarts of Seed.**

**Price, \$14.50. Weight, packed, 59 lbs.**

**No. 5 Planet Jr. Hill and Drill Seeder.**

16 1/2 Inch steel wheel. Sheet steel hopper holding 5 quarts. Built on the same lines as No. 3 Drill, only larger.

**Price, \$13.50. Weight, packed, 52 lbs.**

**No. 2 Planet Jr. Drill Seeder.**

It is similar to No. 1 Planet Jr., Combined Drill, but larger, holding twice as much seed, and having higher wheels and larger roller. Has no cultivating attachment.

**Price, \$8.25. Holds 3 Quarts.** **Weight, packed, 41 lbs.**

## Attachments for Wheel Hoes

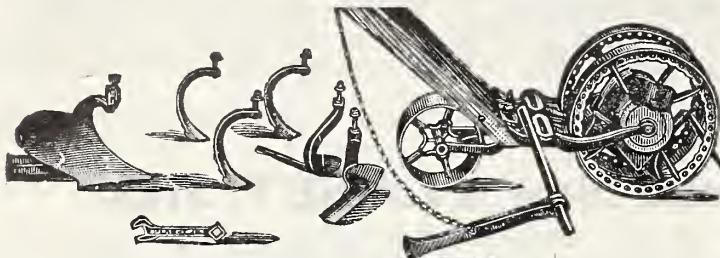
**Peat Land Hoes.** Weight 5 1/2 lbs. per pair. **Per pair, \$1.80.**  
**Disc Hoes.** Weight 5 1/2 lbs. per pair **\$2.80.**  
**6-Inch Hoes, complete.** Weight 2 1/4 lbs. per pair. **Per pair, \$1.10.**

**4 1/2-inch Hoes, complete.** Weight 2 lbs per pair. **Per pair, \$1.00.**  
**3 Prong Cultivator Teeth.** Weight 2 1/2 lbs. per pair. **Per pair, \$1.60.**  
**8-inch Onion Harvester.** Weight 1 1/4 lbs. **\$1.25.**



# Planet Jr. Garden Tools

No. 1 Planet Jr. Combined Drill Seeder, Wheel Hoe, Cultivator and Plow.



Price, with Tools as shown, \$10.50. Holds 3 Pints of Seed. Weight, packed, 44 lbs.

The sowing cylinder is a drum of spring brass set between the driving wheels, with a sliding brass band and cam. In drum and band are corresponding diamond shaped discharge openings, quickly adjusted for any kind of seed. Inside the drum, shields cover the openings, and insure regular sowing with a full hopper or a thimbleful.

A pair of 5 tooth rakes supplied when specially ordered.

Price, extra, \$1.50.

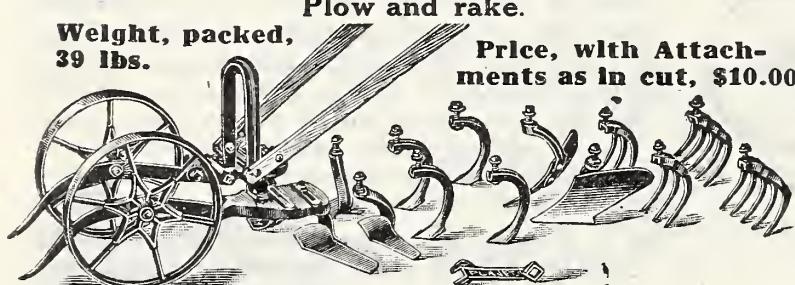
## PLANET JR. WHEEL HOES

### Double Wheel Hoes

No. 11 Planet Jr. Double Wheel Hoe, Cultivator, Plow and rake.

Weight, packed, 39 lbs.

Price, with Attachments as in cut, \$10.00



No. 12 Double Wheel Hoe, Cultivator and Plow.

This tool is identical with No. 11 Wheel Hoe, except that it has one pair plows, one pair hoes and two pair cultivator teeth only, and is sold at a correspondingly less price.

Price, \$7.85. Weight, 34 lbs.

### No. 13 Double Wheel Hoe

This tool is the No. 11, with 6-inch hoes, only, these being the tools that are most generally useful. Any or all of the other tools shown with No. 11 may be added at any time.

Price, \$5.50. Weight, 29 lbs.

No. 14 Planet Jr. Double Wheel Disc Hoe, Cultivator and Plow

This new tool will give excellent satisfaction; is especially pleasing to all who work peat lands. There are three oil tempered discs on each side. The frame is steel.

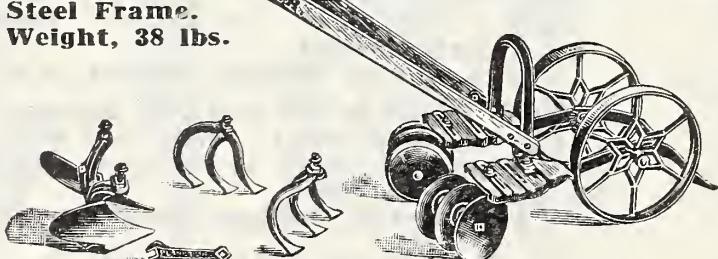
The set of prong cultivator teeth are constructed on entirely new lines, and will be found invaluable in general cultivation.

The plows are the regular Planet Jr. mold and are continually valuable for furrowing, covering and plowing.

No. 14. Price, with Attachments, as in cut, \$9.00.

Steel Frame.

Weight, 38 lbs.



No. 38 Planet Jr. Single Wheel Disc Hoe, Cultivator and Plow

This combination occupies the same position among Single Wheel Hoes as that taken by No. 14 Planet Jr. Double Wheel Disc Hoe among Doubles.

Price, complete, \$7.85. Weight, packed, 28 lbs.

### Single Wheel Hoes

The handies are adjustable in height. The frame is steel, convenient and strong with quick change device by which to exchange the tools without removing the nuts.

Nos. 16, 17, 17 1/2 and 18 wheels, frames and handles are alike, but the attachments sold with each vary.

The hoes are the most valuable of all the wheel hoe attachments; are oil tempered and polished. Use the 4-inch for 6, 10 or 12-inch rows; the 6-inch, for rows 12 inches and upwards.

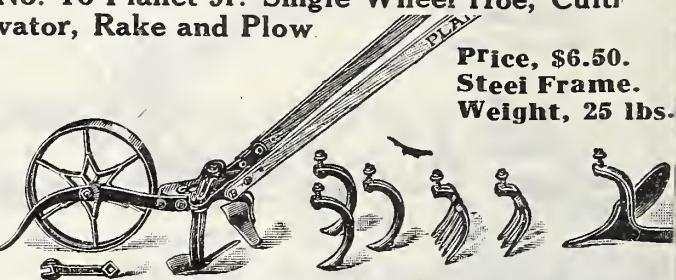
The Plows are invaluable; use them with points together for opening furrows for manure, seed, etc.; then exchange sides for covering; use them also for plowing away from or toward the crop, both sides at once.

The cultivating teeth for deep or shallow work, and for marking out.

Leaf lifters save time and enable fine work to be done close to the row without additional labor, when plants are large or leaves are flat on the ground.

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow

Price, \$6.50.  
Steel Frame.  
Weight, 25 lbs.



### No. 17 Planet Jr. Single Wheel Hoe.

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

Price, \$5.75. Weight, 23 lbs.

### No. 17 1/2 Planet Jr. Single Wheel Hoe.

This tool is identical with No. 16, except in equipment. The pair of 6-inch hoes, three cultivator teeth and leaf lifter which go with it, are all the finest of their kind.

Price, \$5.25. Weight, 21 lbs.

### No. 18 Single Wheel Hoe.

This tool has one pair of 6-inch hoes only — the tools that are most constantly useful throughout the season. Other tools can be added as needed. Price, \$4.25. Weight, 20 lbs.

## IRON KING SEED DRILL—For Onion Growers

The Iron King Seed Drill is acknowledged by the majority of the large onion growers of Oregon and Washington to be the most practical of drills for sowing onion seed. It is a well made, durable and easy running machine, accurate and reliable, and with careful use will last a lifetime. It will save the price of the machine in sowing a few acres. If you are growing onions you cannot afford to be without one. The Iron King can also be set to sow anything from turnips to peas.

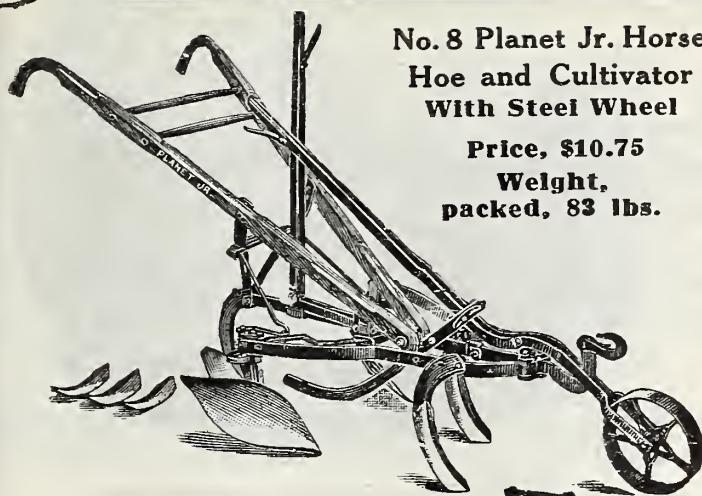
Price, \$9.25.

# Planet Jr. Garden Tools

No. 8 Planet Jr. Horse  
Hoe and Cultivator  
With Steel Wheel

Price, \$10.75

Weight,  
packed, 83 lbs.



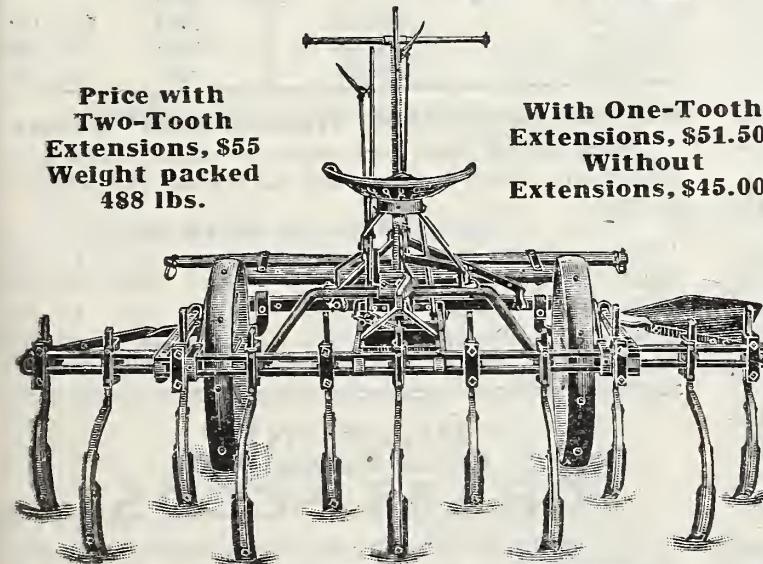
THE NEW  
PLOW  
Attachment  
Fits all  
Horse-Hoes  
See Planet  
Jr. Catalog.



12-Tooth Harrow  
With Steel Wheel  
Complete, \$10.75  
Weight, packed, 73 lbs.  
Without Pulverizer, \$8.85  
Price, plain, \$7.30



Price with  
Two-Tooth  
Extensions, \$55  
Weight packed  
488 lbs.



With One-Tooth  
Extensions, \$51.50  
Without  
Extensions, \$45.00

## Planet Jr. Horse-Hoes

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again.

### No. 9 Planet Jr. Horse Hoe and Cultivator With Steel Wheel

Price, \$9.00. Weight, packed, 70 lbs.

This admirable tool has a plain wheel instead of lever wheel. It has the high frame, patented hollow steel standard, patent lever Star wheel, patent lever expander, and hollow steel wheel arms.

No. 81. Price, \$11.75  
With Steel Wheel  
Weight, packed,  
90 lbs.



### No. 81 Planet Jr. Horse Hoe, Cultivator and Hiller Combined

This is the latest and best tool of the kind. Has six 3-inch cultivator teeth, two 6-inch side plows and a 12-inch furrowing tooth, making an admirable equipment for all widths of cultivation and for hilling crops up to four feet apart.

It has a cultivator tooth central in front, which increases the steadiness of the tool.

### Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer

With the Twelve-Tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil and mellow and fine it as with a garden rake. You widen and narrow as you please between 12 and 32 inches. It's a special favorite with strawberry growers, market gardeners and truckers.

A strawberry runner cutter consisting of a 10-inch flat steel disc mounted on an outrigger. Price, extra, \$2.30.

### No. 41 Planet Jr. Orchard and Universal Cultivator

The steel wheels are low and entirely enclosed by the frame. The tongue is steel.

The frame is high carbon steel, compact in form, well braced, heavy and strong.

Without the extension, it cuts 4 feet in width, having seven stiff steel standards, carrying 2 1/4x10-inch teeth.

With the extension, it cuts 6 feet 6 inches, carrying eleven teeth, and the frame can be changed to cut any width from 6 1/2 down to 4 feet.

**Disc Harrow Attachment.** We sell as an attachment to No. 41 a set of five pairs of discs, making a capital disc harrow.



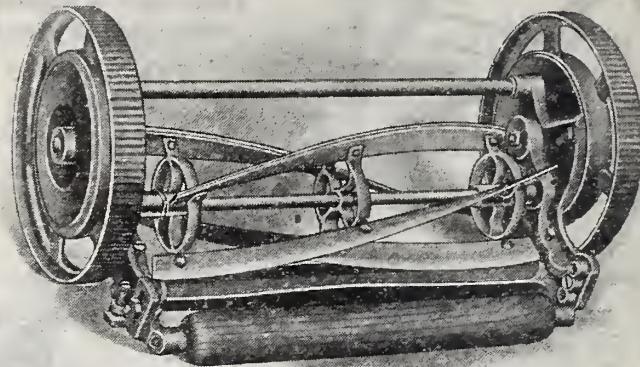
## Highest Grade

Cycle Lawn Mowers.

## Fully Guaranteed

Stationary, draw-cut blade, self sharpening, protected from rocks, nails, etc., keeps the mower close to the turf on uneven ground — cuts all the grass right the first time over.

**CYCLEMOWERS** — Have self-adjusting ball bearings, bed knife rests on frame instead of being supported by screws — as in other models — making it impossible to bend or warp out of alignment, the revolving wiper blades draw the grass over the keen cutting edge of the bed knife. This is the big distinctive feature of the Cycle-mower and is entirely different from other lawn mowers. The bed knife is protected, has lipped cutting edge, does not wear unevenly and is self sharpening and adjusting. We tried them out for a season on our own grounds before offering to our customers and found them superior in every respect. **If you would be free from lawn mower troubles, buy the light running self sharpening Cyclemower.**



"Cyclemowers" are made of Crucible Steel.

## PRICES AND SIZES.

14 in. cut, 8 in. wheel, 4 blades.....	\$ 5.65
16 in. cut, 8 in. wheel, 4 blades.....	5.95
14 in. cut, 9 in. wheel, 4 blades.....	6.50
16 in. cut, 9 in. wheel, 4 blades.....	6.90
14 in. cut, 10 in. wheel, 4 blades.....	7.50

16 in. cut, 10 in. wheel, 4 blades.....	7.85
18 in. cut, 10 in. wheel, 4 blades.....	8.35
14 in. cut, 11 in. wheel, 5 blades.....	9.75
16 in. cut, 11 in. wheel, 5 blades.....	10.95
18 in. cut, 11 in. wheel, 5 blades.....	12.00



### RAFFIA AND REEDS FOR BASKET MAKING.

Raffia weaving has become very popular. Baskets, jewel boxes, shopping bags, mats, cushions, slippers and hats are but a part of the many useful articles woven.

In ordering raffia by mail, be sure to add postage.

**RAFFIA.** — Any shade, the popular colors being red, green, yellow, orange, brown, black, blue and purple.

**Prices.** Natural color,  $\frac{1}{4}$  lb., 10c; postpaid, 15c per lb., 25c.

**COLORED RAFFIA** — Per pkg., 10c; postpd. 12c; Per lb. 60c.

**REEDS.** — In the weaving of the larger baskets Reeds are used as a frame or foundation, making them firmer and heavier. We have these in five sizes.

**Prices:** No. 1, small, per lb., \$1.40; No. 2, \$1.30; No. 3, \$1.20; No. 4, \$1; No. 5, largest size, 90c.

All sizes are put up in convenient packages of 15c each, postpaid.

**SAMPLES showing colors of Raffia and sizes of Reeds sent for 2c to cover postage**

**BASKET MAKING** Tells how to use Raffia and Reeds 25c postpaid

## DUNHAM'S

## ROLLER BEARING

## Lawn Rollers

The only Lawn Roller  
with Automobile  
Roller Bearing  
Axles

They cost no  
more than  
others and run  
44% easier



## PRICES — F. O. B. PORTLAND

	Sec.	Wgt.	
LR404.....	20x20	2	250 \$18.00
LR407.....	20x24	2	300 21.00
LR410.....	24x24	2	450 27.00

## One and Two Section "Water-Weight" Rollers

These can be filled with water or sand, and when empty are easily transported, adjusting the weight to suit.

	Sec.	Empty	Water	Sand
WB5 .....	18x24	1	75	300 500 13.00
WB7 .....	24x24	1	125	500 800 17.50
WB11.....	18x24	2	100	300 500 19.00
WB13.....	24x32	2	170	650 1000 25.00
WB15.....	24x24	2	145	500 800 22.00

### "DIAMOND" Fancy Recleaned GRASS SEEDS

Special mixtures for very wet land, terraces, shady places, tennis courts, golf links. Write us. We can save you money and help you to secure the best possible results from your plantings.


 DIAMOND QUALITY  
**ROSES**

**DIAMOND QUALITY ROSES** are large, sturdy, two-year-old, field-grown roses that will give you splendid flowers the first season. They are true to name and our list includes the best of the well known popular varieties, the most meritorious of recent novelties and the Gold Medal roses of the famous European growers.

**YOUR ROSE ORDER** entrusted to us will insure careful selection and no substitution. If you do not find what you want in this catalog write us. Our excellent connections with the great centers of production enable us to supply any variety in commerce.

### Abbreviations

**T.—TEA**—One of the best classes of roses, and truly ever blooming. They are hardy in this section, frequently wintering without any protection, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

**H. P. HYBRID PERPETUAL**—The hardiest of all roses, vigorous in growth and easy of culture, producing large flowers, fine in form and fragrance.

**H. T.—HYBRID TEA**—Most of these are as free flowering and as constant bloomers as the teas, and are hardier, but, as a rule, not so hardy as the H. P.'s.

### PLANTING AND CARE

In our favored section, Roses attain a perfection seldom equalled, but you can not expect them to thrive and bloom unless you care for them. We offer the following simple suggestions.

**SOIL**—Any good, well-drained garden soil enriched with fertilizer will give excellent results. If heavy clay soil mulch well with burnt earth and manure, rotted sod of leaf mold.

**FERTILIZER**—Our odorless commercial fertilizer, Bone Meal, Tankage of Blood, will give excellent results, and should always be applied after the plants start their growth.

**WATERING**—When setting out, water regularly until roots are well set; then about once a week unless the ground is very dry; in such cases more often. Do not get the foliage wet after a hot day. This causes mildew.

**FINALLY**—Keep the surface well worked around the roots. This is as necessary as water or fertilizer.

**SHIPPING**.—We always send all our two-year-old rose bushes charges collect by express or freight, packing them so they will carry safely even though they should be on the road for two weeks or more. If necessary, we can send small two-year-old bushes by mail at an additional cost of 10c each to cover postage, but in such cases we always prune the tops and roots ready for planting.

When planting cut back freely, and the bush will recover quickly.

**PRICES.**—35c roses, \$3.00 doz.; 40c roses, \$4.00 doz.; 50c roses, \$5.00 doz., 60c roses, \$6.00 doz.; 75c roses, \$8.00 doz.; \$1.00 roses, \$10.00 doz.

 **FOR ALPHABETICAL, CLASSIFIED LIST OF ROSES, SEE PAGE 87.**  
**ROSES ARE NOT PREPAID.**

## Beautiful Roses of Recent Introduction

Magnificent new roses imported direct from famous Irish and Continental growers.  
Two-Year Old Field Grown Plants Only

**GEORGE DICKSON.**—(H. T.) Very strong and vigorous, upright growth, flowers of the largest size; perfect in shape and unique in color, being a velvety blackish crimson with the back of the petals heavily veined with pure crimson maroon. Delightfully scented. **Each, \$1.50.**

**MAD. EDUARD HERRIOTT**—(H. T.) The famous winner of the Daily Mail Prize. The color being terra-cotta bronze and geranium red, a new combination of colors in a rose. The bud is long and sharply pointed; the foliage is dense, leathery and a deep glossy green; a rare beauty. **Each, \$1.50.**

**QUEEN MARY.**—(H. T.) Vigorous, free branching growth, a bedding and garden rose of great beauty and refinement, flowers medium size and fine form, color lemon chrome, bordered at the edge with pure, deep carmine; a charming combination affording a most delightful contrast. **Each, \$1.50.**

**LADY MARY WARD.**—(H. T.) Free, vigorous and hardy, color rich orange, shaded deeper orange with metallic veneering; very brilliant, splendid for bedding and cutting, one of the most beautiful and useful of recent novelties. **Each, \$1.50.**



## Beautiful Roses of Recent Introduction—Continued.

**BRITISH QUEEN.**—(H. T.) Pure white large, full flowers of exquisite form, opening freely in all weathers; promises to be one of the best white roses for bedding and cutting. Surpassing "Druschki" in beauty of form and purity.

Each, \$1.25.

**RAYON D'OR.**—(Pern.) Flowers are large, full, open freely. Buds long, pointed, of deep orange cadmium smeared claret, opening to a rich sunflower yellow, which does not fade. Foliage is deep, glossy green; and free from the attack of mildew. This splendid new rose is a cross between Melaine Soupert and Soliel D'Or. Each, 75c.

**OLD GOLD.**—(H. T.) A splendid garden rose of vivid reddish orange color with coppery red and coppery apricot shadings. Fine for bedding.

Each, \$1.50.

**LYON.**—(Pernetiana.) The Lyon is a beautiful shrimp pink with salmon and chrome yellow shadings. Large, coral red buds, beautifully formed; full, globular flowers of rare beauty; a continuous and free bloomer.

Each, 50c.

**JULIET.**—(H. B.) A magnificent new rose, the color being a wonderful combination of old gold on the outside of petals and a rich, rosy red on the inside. Flowers are large, full and delightfully scented. The foliage is luxuriant and beautiful.

Each, 50c.

## Sunburst Collection Choice Novelties in Roses

Price: Young Plants, 20 cents each; set of 6 sorts, \$1.00;  
2-year-old plants, 75 cents each.

Countess of Shaftesbury

**COUNTESS OF SHAFTESBURY.**—(H. T.) A splendid new pink of the most ideal type of Hybrid Tea; flowers are large, perfect in form and produced in the greatest profusion. The color is a bright, silvery carmine mottled and flushed shell pink, giving a picotee effect; a fine exhibition rose, being a Gold Medal winner and the best pink rose for massing or garden.

**EDWARD MAWLEY.**—(H. T.) Flowers large and full, of finest form, with beautiful, long pointed buds; color deep, rich, velvety crimson which does not fade; flowers keep well when cut; growth is vigorous, upright and branching, with handsome foliage. Edward Mawley is one of the finest red roses ever offered, being a decided advancement in its class.

**MRS. CHAS. E. ALLAN.**—(H. T.) A delightful garden rose of a delicate and novel coloring, opening a pale orange and changing to ochre as the flower opens. Buds are long, pointed, and flowers are full on good stems, flowers freely every shoot producing a bloom. A vigorous grower and one of the finest garden roses ever introduced.

**LADY HILLINGDON.**—(T.) Deep apricot yellow, long and pointed bud, a fine forcing or garden rose, excellent for cutting. Flowers are of a good substance, very lasting and foliage handsome and luxuriant. Lady Hillingdon is considered the best decorative rose in its class. This aristocratic beauty is a seedling from Papa Gontier and Madame Hoste.



**MRS. FOLEY HOBBS.**—(T.) A veritable giant among Tea Roses. Color, delicate ivory white, delicately tinged pink on edge of petals; deliciously scented; a great bedding rose.

**SUNBURST.**—(H. T.) The finest of all yellow roses with long pointed buds carried singly on good stems. Flowers large, full and of most beautiful form, color a superb Cadmium yellow with orange yellow center. The foliage is a handsome bronze green; a vigorous grower and good both as a forcing garden rose.

## Three New Single Irish Roses

2-year-old plants only of these sorts.

**IRISH ELEGANCE.**—(S.) Large, single, golden bronze flowers of great beauty, free and constant bloomer, with deep bronze foliage; a fine button-hole rose. These single roses make a charming garden display, blooming profusely, and are also splendid for exhibition.

Each, 50c.

**IRISH SIMPLICITY.**—(S.) Almost single, pure white and of immense size. The great size and substance of the petals which are slightly cupped and the golden yellow anthers may readily bring to mind the comparison to a huge water lily. Vigorous grower with handsome deep green foliage.

Each, 50c.

**IRISH FIREFLAME.**—A dainty new single rose from Ireland, producing beautifully formed buds which hold their shape a long time. Color old gold shaded and flamed with ruddy crimson. Very distinct and a valuable decorative rose.

Each, \$1.50.

## Grand New Garden Roses

These splendid free blooming Roses are newer varieties that are becoming more plentiful and can be offered at a very low price. In this list you will find many famous prize winners and some of the most beautiful and popular roses.

**Price: Young Plants, 20 cents each; 3 for 50 cents. Price of 2-year old plants, 50c each.**

**DOROTHY PAGE ROBERTS.**—(H. T.) Coppery pink, suffused with apricot yellow, very free and perpetual, a delightful garden rose.

**DUCHESS OF PORTLAND.**—(H. T.) One of the best Dickson introductions; a lovely pale yellow with thick, leathery petals, full and perfect form; hardy, robust rose, blooming earlier and more freely than "Kaiserin," long stems; lovely in bud or flower, and a good keeper. Gold medal N. R. S.

**GLOIRE DE CHEDANE GUINOISSEAU.**—(H. P.) Brilliant vermillion red; large and full; finely formed; a grand rose.

**JONKHEER J. L. MOCK.**—(H. T.) A magnificent and unique rose. Inside of petals, red, outside silvery blush white. Of fine form, good substance and largest size. A strong, rapid grower.

Awarded eight prizes at the recent European shows.

**JOSEPH HILL.**—(H. T.) Salmon pink shaded yellow. Outside petals yellow suffused copper, a large, free blooming rose of elegant form.

**LE PROGRESS.**—(H. T.) Nankeen yellow, opening to saffron yellow; large, full and cupped, opening freely: a grand rose, always in flower.

**MRS. DAVID MCKEE.**—(H. T.) Creamy yellow; large, full, freely and continuously produced. Best of its color.

**MADAME MELANIE SOUPERT.**—(H. T.) Splendid new orange yellow shaded pink; beautiful long-pointed buds, large size, free blooming; a strong, upright grower; best of its color.

**MRS. ARTHUR WADDELL.**—(H. T.) A strong, grower, foliage highly ornamental. Large, long pointed buds of a bright, rosy scarlet, a finely formed flower of a rich apricot or salmon color.

**MRS. AARON WARD.**—(T.) One of the most delightful roses of recent years in a color that catches the eye at once — a deep golden orange color shading out to lemon or creamy yellow at the edge of the petals. One of the most beautiful roses in existence.

**MARQUIS DE SINETY.**—(H. T.) Deep saffron yellow flushed reddish copper. Flower large, beautiful, dark foliage.

**PHARISAER.**—(H. T.) Rose, shaded salmon, blooms freely; opens well, is large and of finest form. A free and constant bloomer.

**REINE MERE D'ITALIA.**—(H. T.) Apricot ochre yellow, medium sized, full flowers, very freely produced. Dainty and beautiful.

**LADY ALICE STANLEY.**—(H. T.) This grand new gold medal rose is large, very full and of splendid substance; petals shell shaped, pointed, giving perfect form to the flowers, which are a lovely, deep coral, inside pale flesh; deliciously fragrant and are very lasting.

## Grand Garden and Exhibition Roses

**Price: Young plants, 15 cents each; 4 for 50 cents; 2-year-old plants 40 cents each; 6 for \$2.00.**

**AVOCA.**—(H. T.) Deep scarlet crimson flowers of perfect form; very fragrant.

**BETTY.**—(H. T.) Beautiful coppery rose color, overspread with golden yellow. Deliciously fragrant; very large, fairly full and of glorious form. Superb decorative variety for the garden.

**COUNTESS OF GOSFORD.**—(H. T.) Clear salmon pink, base of petals shading to saffron yellow, very vigorous; perpetual bloomer.

**FLORENCE PEMBERTON.**—(H. T.) Creamy white, suffused pink. Flowers very large and full, of perfect form and wonderful substance.

**FRANZ DEEGAN.**—(H. T.) This beautiful yellow Hybrid Tea is a fine grower, having dark, leathery foliage and the good habit of throwing up numerous heavy canes, each one crowned by a glorious flower of large size.

**GENERAL McARTHUR.**—(H. T.) Dazzling crimson scarlet; a grand American rose of ideal form, delicious perfume and magnificent foliage. Blooms continuously in great profusion; the grandest red rose for garden or cutting.

**HUGH DICKSON.**—(H. P.) Glowing, crimson-shaded scarlet; large, full, perfectly formed, delightful perfume, strong grower, perpetual bloomer (should be cut back freely). After careful comparative tests, we believe Hugh Dickson is the best hardy red garden rose to date.

**J. B. CLARK.**—(H. T.) One of the finest of new roses. Its glorious flowers are intense scarlet, shaded blackish crimson, of giant size, finely formed and fragrant; growth vigorous and upright.

**HON. INA BINGHAM.**—(H. T.) Bright Pink, good substance, large, desirable garden rose.

**KILLARNEY.**—(H. T.) The new Irish Beauty. Color an exquisite shade of deep shell-pink lightened with silvery pink.

**LADY ASHTOWN.**—(H. T.) One of the finest pinks of a rich, deep, silvery tone; flowers large, perfect form; free blooming; vigorous.

**MAD. RAVARY.**—(H. T.) Beautiful clear orange yellow. Long pointed buds; flowers of fine form.

**MY MARYLAND.**—(H. T.) Beautiful, bright pink, with paler edges; delightfully fragrant; robust grower and very free flowering; flowers full and good keeper. The best pink of its color; especially fine for florists, as well as being one of the grandest garden roses.

**LADY ROBERTS.**—(T.) Rich apricot, base of petals coppery red, edges of petals shaded orange; bud long and pointed; very beautiful.

**MRS. DAVID JARDINE.**—(H. T.) Delightful shade of bright, rosy pink, shading in outer petals to salmon pink; large, highly perfumed.

**MILDRED GRANT.**—(H. P.) Delicate pale pink, shading to silvery white in center; grand giant variety of rare beauty; perfectly formed, pointed buds; full flowers of fine substance.

**MME. LEON PAIN.**—(H. T.) A silvery flesh with yellowish orange center; very large and full; opens freely; vigorous.

**MADAME PHILLIPPE RIVOIRE.**—(H. T.) Beautiful apricot yellow and Nankeen yellow center, reverse of petals carmine; large, full and globular.

**MAD. SEGOND WEBBER.**—(H. T.) Pure, rosy salmon, vivid center, large, full and perfectly formed flower, flowering freely and continuously on stiff erect stems.

**PRINCE DE BULGAIRE.**—(H. T.) Very vigorous grower, with large, bright green foliage; beautiful form of bud, flower very large and full. The outer petals are extremely large, of superb rosy flesh color; center of flower bright red, very fine and free.

**WHITE KILLARNEY.**—(H. T.) The finest ever-blooming white rose for cut flowers. The long pointed buds are of ideal form, petals purest white and heavy wax-like texture, remaining a long time in bud. Flowers are full and beautiful when open and are very lasting.

**W. R. SMITH.**—(T.) (Maidenblush.)—A superb new rose of American origin, producing elegantly shaped buds and open flowers of much beauty. Of exquisite silvery pink color and sweetly perfumed.



## Columbia Collection Choice Roses

1-year-old plants, 15c; set of 12 sorts, \$1.25.

**BELLE SIEBRECHT.**—(H. T.) A true, solid pink of the richest shade, a rare color. The flowers are sweetly perfumed, and large, beautifully formed, of long, tapering shape, with high center, and when half blown the petals reflex in a graceful manner.

**DEAN HOLE.**—(H. T.) Beautiful silvery carmine, shaded bright golden pink; grand flowers of great substance, perfect in form; vigorous, free branching habit; continuous bloomer; one of the best exhibition roses. Gold medal. N. R. S.

**KAI SERIN AUG. VICTORIA.**—(H. T.) A beautiful rose with elegant, large pointed buds and very large, full double flowers; color delicate creamy white; deliciously fragrant. A strong, healthy grower and constant bloomer.

**LA DETROIT.**—(H. T.) A beautiful shell-pink shading in the center to a soft rose pink. Reverse of outer petals creamy-flesh tint, strong, healthy grower; prolific bloomer; delightful tea fragrance.

**MADAME CAROLINE TESTOUT.**—(H. T.) A grand rose of the La France type, but with flowers larger and finer. Color, bright satiny pink; very fragrant and free in bloom. The official "Carnival Rose."

2-year-old plants, 35c; set of 12 sorts, \$3.00.

**LADY BATTERSEA.**—(H. T.) This variety has long, oval buds, sharply pointed; very striking in form. The color is a bright, cherry crimson.

**MAD. ABEL CHATENAY.**—(H. T.) Color, beautiful rosy carmine, with darker shadings. Very richly colored. One of our finest varieties.

**MAMAN COCHET.**—(T.) This is one of the most beautiful Tea roses we list. The color is a deep rosy pink, the inner side of the petals silvery rose.

**RICHMOND.**—(H. T.) The most vivid of ever-blooming red roses, buds and flowers of the most perfect and desirable form. The best of its color.

**SOUV. DE PIERRE NOTTING.**—(T.) Very large, perfectly full, of elegant form; has a beautiful long bud; color, orange yellow, bordered in carmine rose.

**SOUV. DE PRESIDENT CARNOT.**—(H. T.) Lovely shell-pink, delicately tinted with golden fawn on rich creamy white. Superb for bedding in open ground. Makes splendid buds for Summer cutting.

**WHITE MAMAN COCHET.**—(T.) White, grand substance, immense size, exquisitely fragrant and a free bloomer; buds long and pointed.

## Favorite Collection of Beautiful Roses

1-year-old plants, 10c; set of 12 sorts, \$1.25.

**BESSIE BROWN H. T.**—Creamy white; large, full and of very fine form. An exhibition rose.

**CLARA WATSON.**—(H. T.) A bright salmon rose tinted peach, good form; a vigorous grower.

**ETOILE DE LYON.**—(T.) Blooms freely, and every flower is a gem, equaling the Marechal Neil in size. Sweet scented; color, rich golden yellow.

**GRUS AN TEPLITZ or VIRGINIA R. COXE.**—(H. T.) Color, fiery crimson, with a dark velvety sheen, very fragrant. The freest blooming rose.

**LA FRANCE.**—(H. T.) Both flowers and buds are of grand size; color, a silvery rose, changing to pink. A general favorite. Sweetest of all roses.

**MARIE VAN HOUTTE.**—(T.) Of a fine faultless straw-yellow color; outer petals washed and outlined with a bright rosy carmine.

## 2-year-old bushes, 35c; set of 12 sorts, \$3.00.

**PAPA GONTIER.**—(H. T.) Large and semi-double; a vivid cherry red color, shaded yellow, reverse of petals crimson.

**PERLE DES JARDINS.**—(T.) A clear, golden yellow, an indescribably rich and beautiful shade.

**RAINBOW.**—(H. T.) Buds and flowers of large size; color, a beautiful shade of deep pink, distinctly striped and mottled with brilliant crimson, elegantly shaded and toned with rich amber.

**SAFRANO.**—(T.) Bright apricot yellow, tinged orange and fawn.

**VISCOUNTESS FOLKSTONE.**—(H. T.) Flowers borne on strong stems, with thick foliage; color, delicately tinted flesh, almost white, with beautiful satin finish.

**WHITE LA FRANCE.**—(H. T.) This magnificent rose is a pure white La France, having just a breath of rose-tinted blush.

## 15 Fine Hybrid Perpetual Roses

1-year-old plants, 15c; set of 15 sorts, \$1.75, postpaid; 2-year-old plants, 35c each; set of 15 sorts, \$3.75.

**AMERICAN BEAUTY.**—(H. P.) One of the largest, sweetest and best; color rich rosy crimson, shaded and veined in the most charming manner.

**BARONESS ROTHSCHILD (H. P.)**—Flowers of immense size; color bright rosy pink.

**CAPTAIN CHRISTY.**—(H. T.) Flowers very large, of grand form, fragrant and lasting. Thornless growth, beautiful foliage. Color lovely shade of silvery pink.

**CAPTAIN HAYWARD.**—(H. P.) Immense flowers in great freedom, sweetly scented. Color deep glowing red shaded crimson. One of our finest red roses.

**CONRAD F. MEYER.**—(Rug.) Beautiful silvery pink, of grand form and delicious fragrance, hardy in any climate, its handsome foliage makes it most valuable for a flowering hedge.

**FRAU KARL DRUSCHKI.**—(H. P.) The white American Beauty. Makes splendid buds and immense flowers; perfectly double and delightfully fragrant; large, thick petals; bright, shining green leaves, elegantly veined; a healthy, vigorous grower, and a constant and abundant bloomer.

**GLOIRE LYONNAISE.**—(H. T.) Color, chamois yellow, deepest at the center, passing to creamy white; large, full, sweet and very distinct.

**GENERAL JACQUEMINOT.**—(H. P.) Bright, shining crimson; very rich and velvety.

**MRS. R. G. SHARMAN CRAWFORD.**—(H. P.) Lovely deep rose pink, outer petals shaded pale flesh, base white, a new and unique shade. Large perfect flowers, free blooming; a grand Autumn rose.

**MABEL MORRISON.**—(H. P.) Of purest white; velvety in appearance; petals thick and shell-shaped; very double and rounded.

**MARGARET DICKSON.**—(H. P.) Magnificent form; white, with pale flesh center; petals very large, shell-shaped, and of great substance; fragrant.

**MRS. JOHN LAING.**—(H. P.) Very free flowering; color, a soft, delicate pink, with satiny tinge.

**PAUL NEYRON.**—(H. P.) Deep, shining rose, double and handsomely formed; blooms freely, the largest variety in existence.

**PRINCE CAMILLE DE ROHAN.**—(H. P.) Very dark, rich velvety crimson, passing to intense maroon, shaded black; regarded as the best of its color.

**ULRICH BRUNNER.**—(H. P.) A magnificent rose, extra large, bold flowers, full and globular; petals large and of good substance; color, rich, glowing crimson, elegantly flamed with scarlet.

## THE POPULAR RAMBLER ROSES

The Rambler Roses are strong, vigorous climbers, growing ten to twelve feet high in one season. They bear immense clusters of beautiful, fragrant flowers.

**Price: 1-year-old, 15c each; 4 sorts 50c.**  
**Two-year-old plants, 35c each.**

**DOROTHY PERKINS.**— Polyanthus type; color a beautiful bright shell pink; flowers large, very double; petals prettily crinkled; blooms in large clusters of 30 to 40; a splendid keeper.

**FLOWER OF FAIRFIELD.**— Everblooming crimson rambler, brilliant crimson, base of petals white, flowering in great profusion perpetually throughout the season.

**PHILADELPHIA RAMBLER.**— An improved type of the favorite Crimson Rambler; color, deeper, more brilliant and lasting; flowers perfectly double, borne in great profusion, much earlier than the old type; vigorous, luxuriant foliage, not so susceptible to mildew.

**TAUSANDSCHAUN.**— A lovely shade of soft pink, free blooming; a vigorous climber with splendid foliage.

**VEILCHENBLAU (Blue Rambler).**— This is the Blue Rambler which created such a furore in Europe. It is a seedling from Crimson Rambler with semi-double flowers produced in very large trusses. The flowers first open pink, but quickly change to a violet, or steel blue.

**WHITE RAMBLER.**— Flowers pure white, sometimes faintly tinged blush; flowers borne in immense clusters; very vigorous.

**WHITE DOROTHY.**— As its name indicates, it is a sport from Dorothy Perkins, possessing all the fine qualities of that grand variety, but having pure, snow white flowers. This rose, we believe, will become a fixture in the list of climbing roses.

**YELLOW RAMBLER.**— Same type and growth as Crimson Rambler, except for color, which is a pure, bright yellow.



Dorothy Perkins

## Five Choice New Pillar Roses

**Price: Young Plants, 20c each; set of 5 sorts, 75c; 2-year-old plants, 50c each, except as noted.**

**AMERICAN PILLAR — WICH.**— A beautiful bright pink with yellow anthers. The splendid large single flowers are borne in great clusters.

**PINK CHEROKEE.**— A grand new climbing rose, of rare beauty and undoubted merit and entirely distinct from any other climbing rose. The lovely single blossoms are 3 to 5 inches in diameter, saucer shaped and of a beautiful shade of light pink.

**RED DOROTHY PERKINS.**— In this grand new sort we have a fine crimson rambler, but with the glossy green foliage of Dorothy Perkins, therefore never troubled with mildew. Flowers very double, in immense clusters and remarkably lasting.

**DR. VAN FLEET.**— A new Hybrid Climber of great beauty, bearing freely. Large, fully double blooms of a dainty flesh pink with rosy center, flowers of perfect form with reflex petals and are carried on long stems, making this a desirable variety for cutting. Foliage is luxuriant bronze green. A cross of Pres. Carnot and Wichuriana.

**SILVER MOON.**— A magnificent white climber, cross of Wichuriana and Cherokee, large, semi-double blooms of good substance with golden stamens. Flowers are carried on long stems, Foliage is abundant, delightfully fragrant, of a bronze green color and is immune to mildew. Demand has been very heavy and 2-yr. stock is scarce.

**Price, each, 75c.**

## Polyantha and Baby Rambler Roses

**Price, 15c each; set of 6 sorts, 75c; 2-year-old plants, 35c each.**

**CRIMSON BABY RAMBLER.**— The best known of all the Baby Ramblers. Immense heads of crimson scarlet flowers about one inch in diameter. Always in bloom. Fine dwarf growth. Grand border variety.

**JEAN DE ARC.**— Miniature double white flowers in large clusters surmount the plant all summer long.

**ORLEANS.**— Clusters of bright rosy red flowers with centers shaded to pure white. A very valuable and distinct addition to this class of roses.

**JESSIE.**— Bright scarlet shaded crimson. Flowers double and in great clusters. Very free in growth and bloom. Its brilliant color under even the hot sun is its chief characteristic. Very lasting.

**MADAME CECILE BRUNNER.**— Beautifully shaped little buds in clusters. color soft light pink shaded to primrose.

**PINK BABY RAMBLER.**— Similar in growth with the other Baby Ramblers, but with clusters of pretty double bright pink flowers; always in bloom.

## Moss Roses

These old-fashioned Roses are coming into favor and we offer the following as best of their colors.  
**Price, each, 35c; dozen, \$3.00. Not prepaid.**

**BLANCHE MOREAU.**— Flowers pure white, large, sweetly perfumed; Best white Moss Rose.

**CHAPEAU DE NAPOLEON.**— Splendid rich red, best of its color.

**CRESTED MOSS.**— Bright rose, light edging, well mossed.

**SALET.**— Color, lovely satin rose; very full and of great beauty; one of the best.



## CLIMBING AND PILLAR ROSES

Price, 15c each; any 4 sorts, 50c; Two-year-old bushes, 35c each (except as noted).

**AARD'S PILLAR.**— Rich velvety crimson; fine large, full flower, cupped form; a fine hardy, free-blooming, free-growing garden rose.

Price, 2-year, 50c.

**CLIMBING BELLE SIEBRECHT.**—(C. H. T.)— Flowers identical with bush type; vigorous climber; hardy.

**CLIMBING KAISERIN (Mrs. Robert Peary).**— Flowers fine, ivory white, of heavy texture, and large size.

**CLIMBING LA FRANCE.**— Identical with the well-known La France; vigorous climber.

**CLIMBING LADY ASHTOWN.**— Strong, vigorous climbing sport of this well-known valuable rose.

Price, 2-year, 50c.

**CLIMBING MADAME CAROLINE TESTOUT.**— Covered during the whole season with immense globular flowers of the same beautiful shade of pink as seen in the bush sort.

**CLIMBING METEOR.**— Rapid grower; rich, dark velvety crimson flowers.

**CLIMBING PAPA GONTIER.**—(T.) A "Native Sport" from the favorite bush "Papa Gontier".

**CLIMBING WHITE MAMAN COCHET.**— The introducer describes this as identical with the bush type; vigorous free bloomer

Price, 2-year, 50c.

**DUCHESS D'AUERSTADT.**— A splendid climber of the Marechal Neil type, being a more vigorous and hardy rose. Color is a fine rich yellow, flowers are large, full and open freely.

Price, 40c.

**GAINSBOROUGH.**— Graceful flower of dainty shell pink color and satiny finish. Hardy, ever-blooming and a free climber.

**GLOIRE DE DIJON.**— An old favorite, noted for its free flowering, its delicate tea scent, and its shades of color, being a blending of amber, carmine and cream.

**MADAME ALFRED CARRIERE.**— Extra large, full flowers, very double and sweet, and a most profuse and persistent bloomer; color, rich, creamy white, faintly tinged pale yellow and blush.

**MARECHAL NEIL.**— A magnificent deep golden yellow variety; so famous as to need no description; grown the world over for its immense yellow flowers; the finest rose of its color in existence.



## Pillar Collection—Climbing Roses

Two-year-old plants, 35c each. Not prepaid.

**BEAUTY OF GLAZENWOOD.**— Bronzed yellow or copper and fawn color. One of our grandest climbing roses. Very hardy and a free bloomer.

**CLIMBING CECIL BRUNNER.**— Strong rampant climber, ever-blooming clusters of pretty pink flowers, especially beautiful in bud. A gem among climbing roses.

**LA MARQUE.**— Flowers of good size, borne in large clusters; color, pure white.

**REINE MARIE HENRIETTE.**— A strong, vigorous grower; flowers large, full, and of fine form; color, glowing crimson, elegantly shaded.

**REVE D'OR (Climbing Safrano).**— Color apricot yellow, with orange and fawn tints; petals of superb and delicate texture.

**WILLIAM A. RICHARDSON.**— Color, rich coppery yellow, flushed with carmine; a very beautiful variety, having few equals.

## Standard, or Tree Roses

Price of all Tree or Standard Roses, \$1.00 to \$2.00 each, according to size. Not prep'd. Tree roses are budded, or grafted on hardy rose stocks about four feet high. They soon make good sized heads, forming a small tree; especially desirable for planting as single specimens, in backgrounds or rows along walks or driveways.

Order any color or variety you wish and we will send it or give you as good a substitute as possible. We aim to have the following varieties in stock:

Dean Hole  
Mad. Ravary  
Betty  
Gloire de Margottin  
Cecil Brunner  
Franz Deegan  
Lyon  
La France  
K. A. Victoria  
Mad. Caroline Testout  
Ulrich Brunner  
Grus an Teplitz

Papa Gontier  
Perle des Jardines  
Maman Cochet  
Maman Cochet White  
Safrano  
Mrs. Jno. Laing.  
F. K. Druschki  
Baby Rambler  
Hugh Dickson  
Gen. McArthur  
Dorothy Perkins  
Mad. Abel Chatenay

**APHISCIDE** Our Best Summer Spray for

**ROSES**

PRICES: Qts., 25c.; Gal. 60c  
READY FOR USE

## Alphabetical List of Roses

Not prepaid.

Price	Page	Price	Page	Price	Page
Aard's Pillar, H. T.	\$.50	86	Hon. Ina Bingham, H.T.	.40	83
American Beauty, H.P.	.35	84	Irish Elegance, S.	.50	82
American Pillar (Wich.)	.50	85	Irish Fireflame, S.	1.50	82
Avoca, H. T.	.40	83	Irish Simplicity, S.	.50	82
Bessie Brown, H. T.	.35	84	J. B. Clark, H. T.	.40	83
Baroness Rothschild, H. P.	.35	84	Joseph Hill, H. T.	.50	83
Baby Rambler, Poly	.35	85	Jonkheer, J. L. Mock, H. T.	.50	83
Belle Siebrecht, H. T.	.35	84	Juliet, H. B.	.50	82
Betty, H. T.	.40	83	Killarney, H. T.	.40	83
Blue Rose, Poly	.35	85	Kais. A. Victoria, H. T.	.35	84
British Queen, H. T.	1.25	82	Lady Alice Stanley, H.T.	.50	83
Captain Christy, H. T.	.35	84	Lady Hillingdon, T.	.75	82
Captain Hayward, H. P.	.35	84	Lady Mary Ward, H.T.	1.50	81
Cecile Brunner, Poly	.35	86	Lady Ashtown, H. T.	.40	83
Clara Watson, H. T.	.35	84	Lady Battersea, H. T.	.35	84
Climbing Roses	...	86	La France, H. T.	.35	84
Conrad F. Meyer, Rug.	.35	84	Le Progress, H. T.	.50	83
Countess of Gosford, H. T.	.40	83	Lyon, Pern	.50	82
Countess of Shaftesbury, H. T.	.75	82	Lady Roberts, T.	.40	83
Dean Hole, H. T.	.35	84	La Detroit, H. T.	.35	84
Dorothy Page Roberts, H. T.	.50	83	Madam Ravary, H. T.	.40	83
Dorothy Perkins, Poly	.35	85	Mad. Leon Pain, H. T.	.40	83
Duchess d'Auerstadt	.40	86	Mad. Abel Chatenay, H. T.	.35	84
Duchess of Portland, H. T.	.50	83	Mad. Caroline Testout, H. T.	.35	84
Edward Mawley, H. T.	.75	82	Mad. Melaine Soupert, H. T.	.35	84
Etoile de Lyon, T.	.35	84	Mad. Phil Revoire, H. T.	.40	83
Florence Pemberton, H. T.	.40	83	Mad. Segond Webber, H. T.	.40	83
Franz Deegan, H. T.	.40	83	Maman Crochet, T.	.35	84
Frau K. Druschki, H.P.	.35	84	Margaret Dickson, H.P.	.35	84
Flower of Fairfield, Poly	.35	85	Marie van Houtte, T.	.35	84
Gen. McArthur, H. T.	.40	83	Mrs. Aaron Ward, T.	.50	83
George Dickson, H. T.	1.50	81	Mad. Edw. Herriott, H. T.	1.50	81
Grus an Teplitz, H. T.	.35	84	Mabel Morrison, H. P.	.35	84
Gen. Jacqueminot, H. P.	.35	84	Marquise de Sinety, H. T.	.50	83
Gloire Lyonnaise, H. T.	.35	84	Mildred Grant, H. P.	.40	83
Gloire Chedane Guin- oissea, H. P.	.50	83	Mrs. David McKee, H. T.	.50	83
Hugh Dickson, H. P.	.40	83			

## Flower Pots

We carry a large and complete line of standard red clay Flower, Fern, Azalea Pots, Bulb Pans and Hanging Baskets and can make prompt deliveries at right prices.

**Florists, nurserymen and growers should send list of requirements for Special Prices.**

### FLOWER, FERN, AZALEA POTS OR BULB PANS ALL SAME PRICE.

Size	Each	Dozen	Saucers
2 inch	\$0.02	\$0.20	Each
3 inch	.03	.30	
4 inch	.04	.40	\$0.03
5 inch	.07	.70	.04
6 inch	.10	.90	.05
7 inch	.12	1.20	.07½
8 inch	.15	1.75	.10
9 inch	.25	2.50	.15
10 inch	.40	...	.20
12 inch	.60	...	.35
14 inch	1.50	...	1.00
16 inch	2.25	...	1.25

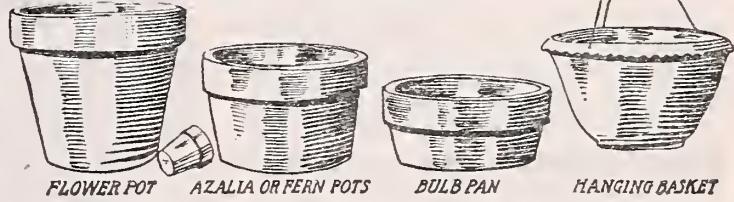
**PAPER FLOWER POTS FOR FLORISTS**  
Low in price, Moisture proof, Unbreakable, Light, Convenient.

100 1000  
2½ inch ..... \$0.60 \$5.50  
3½ inch ..... .80 7.00

### HANGING BASKETS

These are well made and are better than wire baskets, as plants do not dry out so quickly.  
8-inch, each, 30c; doz., \$3.00. 10-inch, each, 40c; doz., \$4.25; 12-inch, each, 60c; doz., \$6.50.

**NOTE.—At above prices we will pack the pots carefully, but buyer must pay freight or express charges.** We buy in carload lots and the wholesale trade, florists and nurserymen are requested to send for special prices, stating number wanted.



## Foster Rose Tubes

For Rosarians and Cut Flower Exhibitors

### FOR SHOWING ROSES

The Foster Exhibition tubes with adjustable clips, enable you to transfer flowers from one position to another without disturbing their arrangement. A wire holds the flower firmly in any desired position. Tubes afford an ample supply of water close to the rose. Used at all English shows.

Price, each, 25c; doz., \$2.75.



**"DIAMOND QUALITY"**  
**DAHLIAS**  
**FOR 1915**



A corner  
of our  
Dahlia Field  
in the  
"Paeony  
Section"

All new  
varieties  
must first  
stand our  
field test  
before they  
are offered  
for sale.



*Group of Cactus Dahlias*

**I**N THE SELECTION OF DAHLIAS only those varieties of known merit should be considered. The great Dahlia Specialists of Europe and America have set a high standard, established by their years of comparative trials and you will have greater satisfaction and better values from their tested varieties which we offer, and which have been officially recognized, than you can possibly obtain from untried varieties of doubtful origin.

**O**UR TRIALS ARE VERY EXTENSIVE and are conducted by a practical Dahlia expert of wide experience. All tests are made in the field without irrigation and the Dahlias we list represent the "survival of the fittest," the best of the standard varieties and meritorious novelties of the most famous producers, varieties that are recognized the world over. They are true to name, erect bloomers and good keepers.

**I**t is important that your Dahlias be recognized varieties and **true to name**. If not, you cannot hope to exhibit them successfully.

### **CULTURE**

**D**AHLIAS will grow to perfection in any good garden soil, preferably one that contains a little sand. Plant as soon as the frost is gone and the ground warm, cutting the tuber to a single strong eye, and placing it on its side at a depth of about 6 inches, in ground that has been previously well cultivated. An excellent way to start Dahlias is to sprout the tuber in a green house and set out the rooted plants. These are generally believed to give more and better flowers, but is more trouble than planting the bulbs. Rows should be four feet apart, plants 18 inches to 3 feet apart in the row, depending on whether planted for a hedge or for specimen plants. Cultivate thoroughly until ready to bloom, then deep tillage must cease and only the surface be lightly stirred, as deep cultivation at this time is fatal to blooming. Tall varieties should be staked.

If you use commercial fertilizer, do not apply until the plant starts growth, then work it into the top soil, 5 or 6 inches from the plant. Bone meal is an excellent fertilizer for Dahlias but must be applied early, as it is slow in action. When the plant is well up, say 6 to 10 inches, pinch off the top, leaving 2 or three joints. This will cause it to branch out into a more sturdy, bushy growth. Water freely.

### **NATIONAL DAHLIA SHOW, PORTLAND, 1915**

The Annual Dahlia Show of the National Dahlia Society will be held at Portland, Ore., during the month of September. Everyone should plant Dahlias in honor of this event and to aid in making the show a big success. Do your part to show the visitors what wonderful Dahlias Oregon can produce. **FULL INFORMATION AND PREMIUM LIST ON REQUEST.**

# 10 CACTUS DAHLIAS for 1915

New and distinctive Dahlias that have proven their worth in our field trials.

Entire Collection, 10 Varieties, \$5.00, Post Paid.

**KALIF**—A giant flower of perfect "Cactus" form, color a brilliant pure scarlet. The immense blooms are freely borne on long, strong stems and make a wonderful display. **Kalif** easily led the hundreds of dahlias we were testing last season, and in Germany where it originated was awarded the highest honor of the German National Dahlia Society. Be sure to plant **Kalif**. **Each \$1.00.**

**H. L. BROUSSON**—**Cactus**—The extremely long and slender petals are daintily twisted and incurved in a most pleasing way. Color is salmon rose on a pale yellow ground, showing lighter center and tips. Special awards. **Price 75c.**

**M. INMAN**—A bright orange vermillion of largest size and finest cactus form; long, narrow petals, an exhibition variety. **Each 50c.**

**FREDERICK WENHAM**.—One of the largest cactus dahlias yet raised; in form the flowers are partially incurved. Growth upright; strong stems; color warm fawn-pink, with soft salmon at the center. **Each, 75c.**

**OLYMPIC**—Deep rich crimson; very large, petals incurved and of great depth; a strong grower. Fine Exhibition Dahlia. **Each, 75c.**

**JOHANNESBERG**—A giant golden yellow of great brilliancy, the shapely graceful flowers being well poised on long stems; a variety of the greatest merit. **Each 50c.**

**MRS. A. P. HOWARD**—Color fiery red with satiny sheen that lends unusual attractiveness to the large graceful flower, fine stems, vigorous and free blooming. **Each 50c.**

**MRS. J. B. CHAFFEY**—A deep rich rose Pink of superb form, flowering abundantly throughout the season and is of great value for cutting; stems strong upright and long—a great beauty under artificial light. **Price 50c**

**MRS. WM. E. RUSSE**—A most pleasing yellow with chamois center, the broad twisted petals edged plum shading to old rose, extra fine stems; an unusually attractive well finished flower. **Each 50c.**

**CURIOSITY**—Large full white flower with claw shaped petals, penciled rose carmine; a very beautiful, graceful and free blooming flower; good stems. **Each 50c.**

## FINEST CACTUS DAHLIAS

From comparative tests in the field we have selected the following as being the best of their types and color. This list contains many of the newest Dahlias as well as the best of the older ones.

**PRICES** 15c DAHLIAS \$1.50 dozen; 20c Dahlias \$2.00 dozen; 25c Dahlias \$2.50 dozen  
35c DAHLIAS \$3.00 dozen; 40c Dahlias \$4.00 dozen; 50c Dahlias \$5.00 dozen

Write for Prices by the Hundred.



### Red and Shades

**AUGENWEIDE**—**Cactus**—Translated this means "a feast for the eyes," and truly this beautiful cactus dahlia is all its name implies. Color is bright rose with deep rose center, grows erect on fine stems and is a full shapely flower. **Each, 50c.**

**BISMARCK**—**Cactus**—A most intense bright red, petals slightly incurved perfect cactus type, has fine carriage of bloom well above the foliage, is an early and continuous bloomer always covered with flowers. one of the very finest reds. **Each, 50c.**

**JOHN PEEL**—**Cactus**—A deep rich crimson with lighter suffusion toward center; a distinctive form of true Cactus type, a splendid keeper, with fine stems. **Each, 50c.**

**MRS. FERDINAND JEFFRIES**—Deep velvety garnet red, the long curved and twisted petals forming a magnificent flower of rare grace and beauty; one of the largest dahlias. **Each, 50c.**

**MARATHON**—**Cactus**—A brilliant purplish maroon; a large, full flower with broad twisted cleft petals—color deeper toward center with light, bright purple shadings on tips and reverse of petals—good stems. **Each, 35c.**

**MARIE PURRIER**—**Cactus**—Extra large brilliant blood-red flower of fine full form, with slender dainty incurved petals; a free bloomer of fine habit of growth, flowers erect and good keepers; a European dahlia of the greatest merit. **Each, 50c.**

**DIAMOND LAWN GRASS MIXTURE**—Makes an Evergreen, Velvety Turf  
Write for prices in large lots.



## CACTUS DAHLIAS—Continued

### Red and Shades

**ARISTID GURTNER**—Flowers of enormous size, petals curved inward, color brilliant orange scarlet; flower free. **Each, 35c.**

**DORNROSCHEN**—Unique and remarkable, variable from carmine to brilliant red, to delicate pinks with blush suffusions; a dainty, perfectly formed, fully double flower; long slender petals, beautifully incurved and quilled; large and free blooming; long stems, erect; compact bush. **35c.**

**DREADNAUGHT**—A giant flower, of graceful form, full, with fine claw-shaped petals; color, deep crimson maroon; a good keeper and splendid flower for exhibition, being the finest of its color and class. **Price, each, 35c.**

**ERB PRINCESSEN REUSS**—A superb shade of blood-red crimson self, the best of its color of finest cactus form, one of the most satisfactory and pleasing reds. **Each, 35c.**

**H. W. SILLEM**—(Cardinal King)—Rich cardinal red, of perfect form, grand exhibition variety. **Each, 25c.**

**MATCHLESS**—Dark rich crimson. **Each, 20c.**

**MRS. HENRY WIRTH**—Rich geranium red, very free flowering. **Each, 35c.**

**OTHELLO**—A glorious full, large flower of deepest richest crimson, center almost black; finest true cactus form; one of the earliest. **Ea. 35c.**

**PROGENITOR**—Bright carmine; fringed petals; a free bloomer of great beauty. **Each, 20c.**

**SIGNAL**—Brilliant crimson scarlet; height 24 inches; flowers large, of fine form; free blooming. **Each, 25c.**

**UNCLE TOM**—Dark maroon, medium size; quite free. **Each, 15c.**

### White

**THE BRIDE**—Cactus—A pure glistening milky white of great substance and of full rounded symmetrical form, grows erect, keeps well cut and the golden variegated foliage is very attractive. **Each, 50c.**

**GUNTHER**—Pure white with broad twisted petals on stiff stems. Large and beautiful. **Each, 50c.**

**LAWINE**—Fine large white, faint blush tint, erect, free-flowering; extra good. **Each, 35c.**

**RHEINKOENIG**—Cactus—(King of the Rhine) Dazzling snow-white of magnificent form and largest size; although large the flowers are daintily formed and of splendid substance, carried above the foliage on fine long stems, and are very lasting when cut. **Each, 35c.**

### Pink and Shades

**BRITTANIA**—Beautiful salmon-pink. **Each, 25c.**

**COUNTESS OF LONSDALE**—Rich, rosy-salmon, very floriferous; one of the best. **Each, 25c.**

**HELENE**—Delicate, clear pink, with rich creamy center, a beautiful flower on very long stems and the greatest bloomer of all. **Each, 15c.**

**KRIEMHILDE**—Blush-pink; a prize winner; one of the finest new Dahlias. **Each, 20c.**

**MARGUERITE BOUCHON**—Brilliant rose with white center and white tips: very strong stems. A dainty and beautiful flower of large size. **Each, \$1.**

**GALATHEA**—Cactus—A delicate soft flesh pink of finest form; a flat petaled type listed in the cactus class by the originator. Galathea is a pleasing and most desirable addition to its class. **Each, 60c.**

**GONDOLA**—Beautiful shade of pink; with bright old-gold penciling; large, with long incurved, twisted petals, lighter at tips; great bloomer. **Each, 35c.**

**GWENDOLINE TUCKER**—Cactus—A dainty rose color with lighter center, a finely formed, full flower, petals incurved, carried on long, strong stems. An exhibition variety. **Each, 50c.**

**MRS. WILLIAM H. TAFT**—Color the lovely pink of La France; rose, with lighter center; a large handsome flower with fine petals beautifully incurved; a vigorous free bloomer. **Each, 75c.**

**REV. T. W. JAMISON**—Exhibition flower or large size; long incurved petals of a bright mauve-pink; suffused with salmon at base. **Each, 50c.**

### Yellow and Shades

**FLOSSIE RIDEOUT**—Pure deep yellow with finest needle-like petals, sometimes with distinct pure white tips. **Each, 35c.**

**LADY FAIR**—Primrose, tinged delicate pink, long incurved petals, free and attractive. **Each, 50c.**

**IVERNIA**—Beautiful form, of all around excellence; bright salmon fawn. **Each, 35c.**

**DRAGON D'OR**—A magnificent deep rich yellow of mammoth size. Petals broad and deeply cleft at tips. **Each, 25c.**

**CAPSTAN**—Orange-scarlet and apricot; one of the finest for cut flowers; dwarf-habit, free-bloomer, large perfect flowers. **Each, 15c.**

**DESDEMONA**—An exquisitely beautiful, daintily formed flower. The central shade is a lovely creamy canary shading to white at the ends of the slender, incurved petals; flowers very full, erect, borne on long stems. **Each, 50c.**

**GENOVEVA**—An elegant distinctive flower of a pale canary yellow, with a beautiful faint greenish tinge suffusing the entire flower, which is large, with well filled incurving petals. **Ea., 35c.**

**GOLD REGEN**—True cactus type, twisted petals, deep bright yellow; long stiff stems; a splendid flower. **Each, 40c.**

**DR. ROY APPLETON**—Cactus—The finest of the straight petal type, of perfect starlike form; color a beautiful light lemon yellow, merging to light salmon, lighter at tips; plants of good habit with long stems and one of the best for exhibition purposes. **Each, \$1.00.**

**GELBER PRINZ**—Cactus—A grand new yellow of Marechal Neil shade, a color never before obtained in a Dahlia. Flowers are extra large, and graceful form, full centers, carried on large stems and keep well both cut and on the bush. **Each, 60c.**

**PORROLA**—Cactus—An interesting fancy variety color, pale-pink, margined with clear orange bands; very variable; frequently producing self-color flowers, but pretty in either form. **50c.**

**MASTER CARL**—Bright amber, of giant size and perfect form, immense petals, gracefully curved; free-blooming, distinctive. **Each, 35c.**

**MISS DOROTHY OLIVER**—Pale primrose yellow; long narrow petals; fine form. **Each, 35c.**

**MODELL**—A beautiful clear waxy yellow, with a delicate plum blush sheen over tips of petals; a dainty, lovely flower of large size, perfect form, petals incurving, erect on long stems; one of the best bloomers and most vigorous growers. **Each, 50c.**

**WODAN**—Cactus—Magnificent flowers of largest size and pleasing form, color orange rose shading to old gold center, very vigorous. **Each, 50c.**

### Lavender

**MAUVE QUEEN**—A beautiful true lavender with lighter center, full flower with finely quilled petals beautifully formed, incurved. **Each, 35c.**

**INDOMITABLE**—Cactus—Long, very narrow petals, perfectly incurved; in color a rosy mauve; a beautiful erect flower on good stems. **Each, 50c.**

## CACTUS DAHLIAS—Continued

### Variegated and Shaded

**COMET**—Extra large, silvery rose, marked crimson, a very free bloomer, of good habit. **Each, 25c.**

**RELIABLE**—A blending of yellow, brick-red and salmon; truly a grand flower. **Each, 25c.**

### Decorative Dahlias

#### A Magnificent Collection of the Best of this Superb Type

**PRINCESS JULIANA**—Originating in Holland; flowers are pure white, of perfect form; foliage is rich dark green. A splendid grower and profuse bloomer, the magnificent flowers carried on long, strong stems, will keep for days when cut. Special Award Royal Horticultural Society.

**Plants or tubers, each, 50c.**

**KAISERIN AUGUSTA VICTORIA**—Magnificent white flowers, of immense size and perfect form, borne erect on long stems. **Each, 35c.**

**LAVENDER QUEEN**—Clear, soft lavender; petals deeply serrated. **Each, 15c.**

**GAIETY**—A superb new decorative, vivid scarlet, heavily marked with pure white; stems are long and flowers are produced freely; excellent for cut flowers. **Each, 35c.**

**MRS. WINTERS**—Snow white, large beautiful form. **Each, 20c.**

**NAVAJO**—Rich, velvety red; splendid sort. **Each, 15c.**

**ORANGE KING**—Deep brilliant orange scarlet of finest form, full blooming. **Each, 15c.**

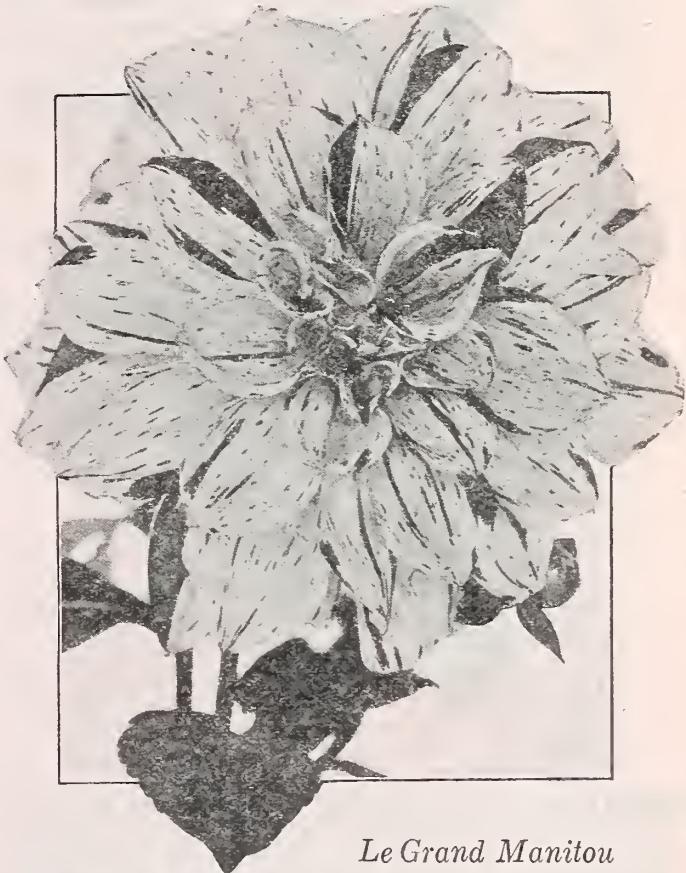
**SOUVENIR DE GUSTAVE DOAZON**—The largest Dahlia to date; often growing 9 inches in diameter; constant bloomer, magnificent rich scarlet color; the greatest of all Dahlias. **Each, 25c.**

**MEADOW GOLD**—A lovely clear lemon shading to creamy tips, a free and constant bloomer, with long strong stems. **Price, 35c**

**REISEN VON STUTTGART**—A bright blood red; seedling of the famous "Doazon", which it exceeds in size and beauty. A free bloomer and good cut flower. **Price each, 35c.**

**MME OCTAVIE GRAINDORGE**—NEW—A magnificent pure white, of great beauty of form; an ideal flower in every way. **Price each, 50c.**

**DELICE**—(Decorative)—Lovely shade of pink, broad petaled flowers with large stiff stems, very floriferous. **A fine, lasting cut flower. Each, 35c.**



*Le Grand Manitou*

**LE GRAND MANITOU**—(Decorative)—Immense perfect flowers, color a white ground splashed and striped with deep violet red; the finest variegated Dahlia in the decorative class. **Each, 35c.**

**MME. A. LUMIERE**—Pure white with violet red points, good. **Each, 25c.**

**JEANNE CHARMET**—A beautiful lilac pink; each petal edged with white; flowers are very large and stems exceptionally long; very fine. **Height, 4 feet. Each, 25c.**

### Show Dahlias

The show or "quilled" Dahlia is the popular old fashioned type and has been so improved that many of our most magnificent flowers belong in this class.

**A. D. LIVONI**—This grand old variety still remains the best pink of its type. **Each, 15c.**

**DIADEM**—Brilliant rich crimson of fine full form, free blooming, has good stems. **Each, 25c.**

**DREER'S WHITE**—A magnificent white of largest size and great purity, long stems. The best of its color. **Each, 35c.**

**FRANK SMITH**—Very dark rich red with light tips, variable; a fine full flower, good grower. **Each, 15c.**

**GOLDEN BOW**—A new rich yellow of splendid form, has long stems, large flowers and blooms continuously. **Price, 35c.**

**THOS. PENDRED**—Finest and largest of the pure yellows, a rich soft shade of golden yellow, perfect form, blooms freely and continuously, even in driest weather. **Each, 25c.**

**JOHN BENNETT**—Yellow deeply edged scarlet; a very free bloomer and a desirable color. **Each, 25c.**

**GRAND DUKE ALEXIS**—A giant glistening clear white flower with the daintiest of lavender flakes or markings near center. Nothing surpassing this magnificent dahlia has ever been produced. **Each, 25c.**

**MRS. ROOSEVELT**—A beautiful, delicate pink, of immense size, fine stems, perfect form, large and double, superb. **Each, 35c.**

**NORMA**—Pure old gold with delicate plum suffusion that adds to its brilliancy; a full, well formed flower on good stems. **Each, 25c.**

**W. W. RAWSON**—Pure white overlaid with amethyst blue. Petals are quilled toward center but more open at outer part. The massive flowers often measure 7 inches in diameter; borne on stiff erect stems. **Each, 50c.**

**LUCY FAWCETT**—Light canary yellow, with penciling of clear magenta. Large and very free. **Each, 20c.**



Many DAHLIAS

not here listed can be supplied on demand—as we grow hundreds of varieties in our trials. Send in your list.



## Paeony Flowered Dahlias



Remember the 1915 National Dahlia Society's Show will be in Portland this year. Do your share to make it a BIG SUCCESS

ORIGINATING in Holland, the Paeony flowered Dahlias have become a great specialty with these famous growers, and the marvelous beauty and magnificence of the new types and varieties fully justify their claims to distinction as the most satisfactory garden Dahlia, and as cut flowers are unexcelled.

The rare new shades, brilliant coloring, velvety finish and glistening sheen of their petals, their giant size, yet most graceful and pleasing forms are unexcelled by any class of flowers. Too much can not be said in their praise and our splendid assortment of latest European novelties have surpassed our greatest expectations. All have received special certificates of merit at the Amsterdam and Haarlem Shows, and we urge you to make at least a trial planting.

The blossoms are semi-double, of enormous size and the coloring is most brilliant and beautiful. They come in several pleasing forms generally with 3 to 5 rows of petals, which are long and broad, sometimes being beautifully curled and twisted.

Paeony Dahlias bloom more freely than any other class and are very vigorous, growing to a height of 5 to 6 feet, with their flowers on long stems above the foliage.

The three new "Hortulanus" varieties are superb, giant, graceful flowers that approach the decorative type in form and regularity, but are listed in the Paeony Class, by the Hollanders and we have included these and other giant flowering sorts that resemble the decorative forms, in this class to which they seem rightfully to belong.

*The following list includes the most popular sorts and best of the recent introductions*

**LA HOLLANDE**—Dainty light rose with golden suffusion that deepens toward the center. A large and beautiful flower, good stems. Certificate of merit. **Each, 75c.**

**H. J. LOVINK**—Dainty shade of lilac on white ground shading to clear yellow center. A large and pleasing flower. **Each, 75c.**

**MADAM VON BYSTEIN**—A magnificent lilac lavender, changing to light blue. A dainty, fluffy flower of large size and lovely form; good stems. A graceful, refined flower of a new and beautiful shade. Sure to thrive and please you. **Each, 75c.**

**OREGON BEAUTY**—The rare color—bright fiery scarlet with golden sheen—its very distinctive form, giant size, long stems and vigorous free blooming habit make it indeed a very worthy Dahlia for any garden. An Oregon production of the greatest merit. **Price each, 50c.**

**DR. PEARY**—Brilliant, dark, velvety garnet red of magnificent form, the large twisted petals producing a brilliant flower of great beauty. The small deep golden center enhancing the brilliancy of the pure self-colored petals. One of the most pleasing of the newer Paeony Dahlias. Flowers well poised on strong stems. **Each, 75c.**

**A. SCHUTTEVAER**—White ground with lilac suffusion. A rare and beautiful flower of large size and finest paeony form; erect, good stems. **Each, 50c.**

**SHERLOCK HOLMES**—A pure, lovely lavender self-color entirely free from purple or reddish tints; large, full, gracefully poised flower on extra good stems. One of the most pleasing and distinctive new Dahlias. **Each, 75c.**

**ZEPPELIN**—A rich, bright lavender of the largest size, well poised on big strong stems. A truly magnificent flower of great beauty. Award of merit. **Each, 75c.**

**AMERICA**—A glowing old rose overlaid with a rich shade of old gold. A shapely, full flower of 7 to 9 inches in diameter, with broad, gracefully twisted petals; flowers erect on long, strong stems. A magnificent and distinctive flower well worthy of the name "AMERICA." First-class certificate Amsterdam and Harlem. **Each, 75c.**

**GLORY OF NYKERK**—Dark, violet red, overlaid with blackish crimson. A brilliant and attractive flower of large size and finest Paeony type; good stems, beautiful and distinct foliage. **Each, 75c.**

**GREAT BRITAIN**—A magnificent, full petaled flower; color a pleasing light mauve with dark markings towards center. Of the largest size and most graceful Paeony type. First-class certificate Amsterdam and Harlem Sept. 1912. **Each, 75c.**

**HORTULANUS BUDDE**—Opens a clear, bright crimson changing to lovely rich old rose, shading to delicate fawn at tips and margins of the broad, velvety petals. A grand, giant flower, well poised on long strong stems. Special award of merit. **Each, 50c.**

**HORTULANUS FIET**—Bright salmon rose on old gold and orange, lighter toward tips. A most magnificent and truly marvelous flower, being a mass of blooms throughout the season. **Each, 75c.**

**HORTULANUS WITTE**—A wonderful giant white of great beauty, the broad, graceful petals are of good substance and of a glistening pearly, white with fine large stems. Similar in form and size to other Hortulanus varieties. First-class certificate. **Each, 75c.**

**JAN OLIESLAGERS**—A grand, new clear deep yellow of fine Paeony form. Flowers of good substance, brilliant finish, erect on long stems. **Each, 75c.**

## PAEONY FLOWERED DAHLIAS—Continued

**A. C. IDE.**—Dark carmine red. **Each, 50c.**

**ANDREW CARNEGIE**—Salmon pink, shaded bronze, center very prominent and rounded; petals are somewhat flat, making it a distinct shape. Height, 4 feet. **Each, 50c.**

**BEAUTY OF CROYDON HALL**—Shades of lilac, salmon and pink, a profuse bloomer of splendid form. **Price 50c.**

**BERTHA VON SUTTNER**—Salmon pink, shaded yellow, erect, elegant form. Height 4 1/2 feet. **Each, 50c.**

**CAESAR**—New. This is the finest yellow of the Peony section, a magnificent semi-double, clear bright yellow, flower of perfect form, borne erect on long stems; a vigorous grower and free bloomer. Height, 4 feet. **Each, 50c.**

**COEUR DE LA PAIX**.—Light purple, tinged terra-cotta. **Each, 50c.**

**DOMINION**.—Bright rosé red, shading rose-pink toward edges; large full flower, ornamental foliage. **Each, 50c.**

**DR. K. W. VAN GHORKOM**—White shaded rose. Flowers large and free bloomng. **Each. 50c.**

**GEISHA**—Geisha has a rich, bright golden yellow ground color near center; suffused and heavily marked with clear, bright red, shading toward points of petals into the clear yellow of the ground color; a beautiful deep golden center adds to the harmony of the color scheme which is the most striking and brilliant ever seen in a Dahlia. The immense flowers often attain a width of 10 to 12 inches, and the massive petals are twisted and curled in the most fantastic manner. **Each, 50c.**

**GERMANIA**—A rich, dark, velvety wine color with suffusion of golden-yellow toward the edges of petals. Germania is free from the purplish tint that spoils other reds. **Plants or tubers.** **Each, 35c.**

**GLORY OF GROENEKAN**—Extra large flowers of finest form. Color a splendid golden orange. Strong grower; free-flowering. **Plants or tubers.** **Each, 35c.**

**GIANT EDELWEISS**—This new type of Dahlia has true cactus petals of enormous length, curving inward at the tips; color a pure glistening velvety white, of great substance; the center is a brilliant golden yellow, a perfect duplicate of the famous Edelweiss of the Alps, on a gigantic scale, hence its name. Flowers are erect above foliage on long stems, a vigorous bloomer, 5 feet. **Each, 35c.**

**KING GEORGE**.—Rich wine red, large full flower, very conspicuous. **Each, 50c.**

**CECILIA**.—Cream yellow shading to white. Large long stems, good. Height 5 feet. **Each, 35c.**

**MANNEHEIM**—Soft orange, with golden suffusion fine form. Height 6 feet. **Each, 50c.**

**MME. BUTTERFLY**.—Soft salmon rose, having a rich golden sheen. **Each, 50c.**

**PHILADELPHIA**—In form this is a semi-double cactus of giant size; color, rich reddish-purple with brighter shadings, suffused and marked with white; very free flowering and gay. **Each, 35c.**

**PRESIDENT FALLIERS**.—Orange red. **Each, 50c.**

**P. W. JANSSEN**—A magnificent Dahlia of splendid form and distinctive coloring, being a lovely shade of old rose, marked and suffused with deep, rich golden yellow, a rare and beautiful combination. Extra fine. **Each, 35c, postpaid.**

**QUEEN EMMA**—A bright pink with darker pink penciling and narrow yellow shading in center of petals. **Each, 35c.**

**QUEEN WILHELMINA**—Large, pure white, central petals beautifully twisted and curled; very vigorous and free flowering; one of the finest garden Dahlias. **Plants or tubers. Each, 35c.**

**RHEINGAU**—Large pointed petals, dark brilliant scarlet; immense size. A fitting companion to Giant Edelweiss, being of the same general type. **Each, 50c.**

**THE BRIDE**—A giant flower of graceful form. Color is silvery white, of full fluffy Peony type, center petals twisted, good stems. Certificate Amsterdam and Haarlem shows. **Price, \$1.50.**

### Pom Pon Dahlias

These are pretty little globe shaped flowers on long stems, high above the dwarf foliage, fine for border, keep well when cut.

**BESSIE**—Creamy white, finely quilled. **Each, 15c.**

**CATHERINE**—Purest yellow; large. **Each, 20c.**

**DARKEST OF ALL**—Darkest pom-pon; perfect flowers. **Each, 20c.**

**LITTLE HERMAN**—Deep carmine, shaded garnet; tipped white. **Each, 20c.**

**NERISSA**—Soft pink, silvery tint; a beautiful new color. **Each, 20c.**

**WHITE ASTER**—("Guiding Star"). A dainty, graceful, pure white flower with tips of petals cleft, giving a fringed effect. **Each, 20c.**

**FLOSSIE**—Small rose pink, very free. **Each 20c.**

**GUINEVERE**—Pale salmon and yellow suffused and shaded pink with distinct gold tips. **Each 20c.**

**GLOW WORM**—An odd and pleasing yellow tipped cinnebar. **Each 20c.**

**POMPONIA**—Bright amber edged rosy cerise. **Each 20c.**

**HYPATICA**—Amber shaded fawn edge and center lighter. **Each 20c.**

**LILACEA**—Pale blush pink tipped rosy lilac. **Each 20c.**

### Collarette Dahlias

Collarette Dahlias are of French origin, having single flowers with an additional row of petals around the disc, forming a frill or collar usually of a contrasting color.

**COLLARETTA**.—Lovely rose-shaded pink, yellow and rose collarette; very pretty. **Each, 35c.**

**FINE FLEUR**.—Shades of fawn, apricot and yellow. Yellow collarette, very distinct. **Each, 50c.**

**ALBERT MAUMENE**.—Rosy mauve, suffused with lilac, white collarette, fine stems. **Each 35c.**

**TITANIA**.—Deep crimson, edged rosy lake, white collarette. **Each, 35c.**

### HARDY FERNS for SHADY BORDERS and ROCKWORK.

6 BEAUTIFUL and USEFUL VARIETIES—TRIAL COLLECTION FOR \$1.25—SEE PAGE 104.



# GLADIOLI

THE newer types are of immense size and exquisite coloring; their grace and attractiveness, ease of cultivation and freedom of bloom are making them universal favorites. They come at a season when there are few other flowers and everyone should grow them.

**CULTURE.**—Gladioli may be planted as early as the ground can be worked or as late as June. A sunny situation is preferred. Plant to a depth of 3 to 6 inches, depending on the size of the bulb. Largest bulbs are not always best, as some varieties do not produce large bulbs. Any garden soil will give satisfactory results, but if well enriched, cultivated and freely watered when buds first show, Gladioli will amply repay you for this additional care. If cut when the first bud opens and put in water, the flowers will open perfectly, keep for many days, and the coloring is richer and more delicate than if left to open on the plant.

## 4 Fine Gladioli for 1915

**Set of four, 1 bulb each, \$1.75, postpaid.**

**MRS. FRANK PENDLETON.**—A clear brilliant salmon pink with bright blood-red blotch in throat, on lower petal. A truly superb flower of largest size, opens freely and keeps well and is considered the most valuable and beautiful new Gladiolus. Highest awards at the Boston and Baltimore shows.

**Price, each, 60c; doz., \$5.00.**

**EUROPA.**—Snow white without a trace of color or shading, the most sensational flower of its class ever produced. Special awards at every European show where exhibited. A grand flower of great beauty and substance.

**Price, 60c.**

**NIAGARA.**—A grand new Gladiolus of the "America" type, the color being a lovely deep cream, shading to a canary yellow on the two lower inside petals. "Niagara" won certificates of merit at Boston and Haarlem, Holland. Also won the open class award of the American Gladiolus Society for the best yellow.

**Each, 30c; per doz., \$3.00.**

**PANAMA.**—A new seedling of America, identical except in color, which is much deeper pink than America. Spike long and the large flowers are well arranged and bloom out freely. A prizewinner everywhere exhibited.

**Price, Each, 60c; doz., \$5.00**

## 10 Beautiful New Gladioli

**SPECIAL.—Entire Collection, 10 Bulbs, \$1.50, postpaid.**

**AMERICA**—Exquisite shade of flesh pink tinted lavender. A grand giant flower, hardy and free blooming.

**Each 10c; doz., 75c; 100, \$4.00**

**CONTRAST**—Intense scarlet with pure white center; one of the grandest, most attractive new flowers.

**Price, each, 35c; doz., \$3.75**

**PRINCEPS**—Giant flowers of richest, most brilliant crimson with fine white blotch on lower petal; the most striking and beautiful of the newer Gladioli; a great favorite with florists.

**Price, each, 15c; doz., \$1.50**

**MRS. FRANCES KING**—A pleasing light scarlet; fine for forcing.

**Each, 10c; doz., 70c; 100, \$4.00**

**CANARY BIRD**—A pleasing bright yellow.

**Price, each, 10c; doz., \$1.00**

**"GLORY"**—Color a delicate cream pink tint with an attractive crimson stripe in the center of each lower petal. Flowers large, paired and faced the same way, borne on strong stalks, 3 1/2 feet high, from 4 to 8 flowers open at the same time, petals are exquisitely ruffled and fluted, giving the flower a refined, graceful appearance.

**Price, each, 15c; doz., \$1.50.**

**WILD ROSE**—Bright rose or blush tint, of rare beauty; large, free-flowering; forces well. **Price, each, 20c; doz., \$1.75**

**BARON HULOT**—The only true blue Gladioli; a dark indigo shade; very popular. **Price, each, 10c; doz., \$1.00**

## Select Named Gladioli

**SPECIAL.—Collection of 8 Varieties, 70c, postpaid.**

**MAY**—Lovely pure white flowers of finest form, with edges flaked crimson.

**Price, each, 10c; doz., \$1.00**

**MME. MONERET**—Grand spikes of large delicate rose flowers, with deeper shadings; A fine cut flower.

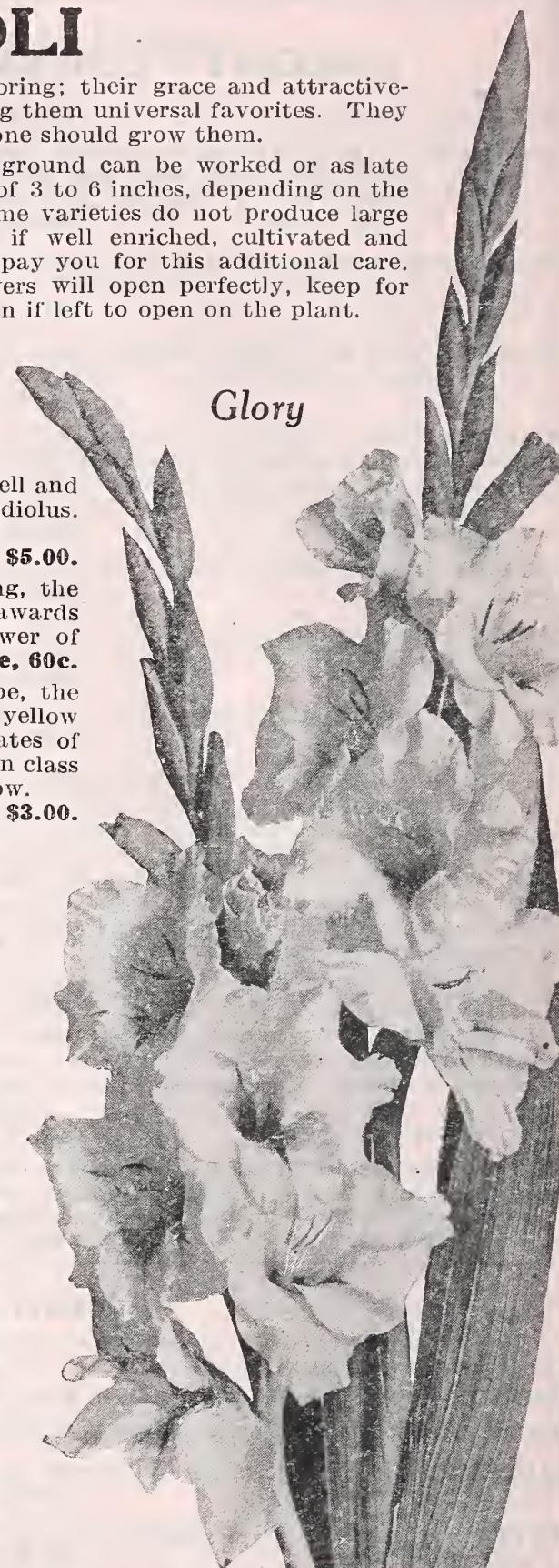
**Price, each, 10c; doz., \$1.00**

**AUGUSTA**—Lovely pure white; blue anthers.

**Price, each, 10c; doz., \$1.00**

**ATTRACTION**—Deep crimson, white center.

**Price, each, 10c; doz., \$1.00**



**BLANCHE**—A splendid large white flower with but faint markings. One of the best. **Price, each, 25c; doz., \$2.50**

**HARLEQUIN**—White-striped and suffused with rich dark crimson.

**Price, each, 25c; doz., \$2.50**

**I. S. HENDRICKSON**—Large, beautiful flowers mottled, white and pink; variable.

**Price, each, 15c; doz., \$1.50**

**BRENCHLEYENSIS**—Rich vermillion, shading to scarlet.

**Price, each, 7c; doz., 60c.**

**KLONDYKE**—Light yellow, crimson maroon blotch.

**Price, each, 10c; doz., 75c**

**SUPERB**—Enormous pink, flaked and striped salmon.

**Price, each, 10c; doz., \$1.00**

## Mixed Gladioli

**DIAMOND MIXTURE**—Select named varieties with choicest Childsi Hybrids.

Doz., 75c; 100, \$5.00

**GLADIOLI CHILDSI**—Of grand size and color, very showy, containing a large per cent of red and dark shades.

Doz., 60c; 100, \$4.00

**GLADIOLI, FINE MIXED**—This mixture will produce a large variety of fine flowers unequalled for the price.

Doz., 35c; 100, \$2.50

**GLADIOLI, GROFF'S HYBRIDS**—A mixture of Hybrids of all sorts, giving in one bed the greatest range of colors and variations.

Doz., 50c; 100, \$4.00

**GLADIOLI LEMOINEI**—Mostly light shades, odd and fantastic markings. Brilliant and showy.

Doz., 50c; 100, \$3.00

## CANNAS

**W**E are extensive growers of Cannas, and the following sorts are newer and better types that will give best results in our climate. Cannas require a rich, moist soil and should not be planted until all danger of frost is past. They are quick growers and the new flowering sorts bloom continuously until frost. Inexpensive, these charming ornamental plants produce rich tropical effects that cannot be excelled, and the grand new varieties offered are equally valuable for the beauty of their bloom. Let us know your requirements. We can supply the correct variety.

**Prices, except where noted: Bulbs or plants in season, each, 20c; dozen, \$2.00, postpaid.**

**ALICE ROOSEVELT**—Deep crimson, compact green foliage; similar and superior to Alphonse Bouvier. Height 4 to 5 feet.

**KING HUMBERT**—In this grand new orchid-flowered Italian Canna we have a combination of the highest type of flower with the finest bronze foliage. Its mammoth flowers, in heavy trusses, are a brilliant orange-scarlet, with bright red markings, foliage is broad and massive and of a rich coppery bronze with brownish green markings; bold and effective; has no equal; 5 to 6 feet.

**M. BLANC**—A compact vigorous grower, producing a massive spike of large, pure white flowers carried well above the glossy green foliage.

**FEURMEER**—A magnificent clear bright red, flowers and spikes of large size and freely produced; foliage deep green. Height, about 5 feet. One of the very finest reds.

**STUTTGARTIA**—The large flowers are a brilliant orange-scarlet with bright yellow band and markings. Flower spikes strong and erect above the foliage which is broad leaved, dark green and very luxuriant. Height, 4 to 5 feet.

**MRS. ALFRED F. CONARD**—Flowers are a superb salmon pink of large size borne very freely and continuously on large, erect spikes; very luxuriant green foliage; height about 4 feet.

**KOROS.**—Attractive shade of orange scarlet, streaked and dotted with carmine; bronze foliage; 4 to 4½ ft.

**MME. CROZY.**—Flowers rich orange scarlet edged with bright golden yellow; foliage green. 3½ ft.

**MEPHISTO.**—The darkest crimson yet introduced; foliage green. 3½ ft.

**PROF. RODENWALDT.**—Large deep crimson flowers of compact habit. 3 ft.

**W. E. COTTRELL**—Pink, suffused orange; foliage green, margined brown; 3½ feet; fine.

Price, each 25c; doz., \$2.50.

**LOUISIANA**—A strong, vigorous grower, producing a dense mass of glossy green foliage and vivid orange-scarlet flowers of mammoth size; Orchid type; height 4 to 5 feet.

**ROSEA GIGANTEA**—Finest of the new pinks, the rich, deep rose-colored flowers often measuring five inches across are borne in the greatest profusion, nothing finer has ever been offered foliage green; 4 to 5 feet.

**FLORENCE VAUGHAN**—We offer a new seedling of this most famous canna that is a distinct improvement in growth, vigor and bloom; the color and markings are about the same only more brilliant and beautiful; a deep, bright yellow mottled and marked with bright red. Green foliage. Height, 4 to 5 feet.

**NEW CHICAGO**—A brilliant clear scarlet that holds its color; free-blooming and very vigorous full foliaged plant; a most desirable sort. Height 4 to 5 feet.

**CARL LUTZ**—New. A splendid bright rich yellow of finest form; foliage leathery and luxuriant. A fine, upright grower and profuse bloomer. Height, 3½ feet.

**MRS. KARL KELSEY.**—Immense orange scarlet flowers flaked and striped with yellow; petals wavy edged. Foliage green with narrow purple edge. 6 to 7 ft.

**WYOMING.**—Massive orange colored flowers of orchid shape with bronzy-purple foliage. 7 ft.

**AUSTRIA.**—Orchid flowering type. Flowers 6 to 7 inches across, of pure golden yellow; foliage green. 5 ft.

**FIRST PRIZE for Best Exhibit has been awarded to our "Diamond Quality" DAHLIAS every time we have shown.—**

They represent the choicest, most improved varieties from the most Famous Producers. They are true to name and have proven their merits in the big European and American Shows, and in our own field trials.

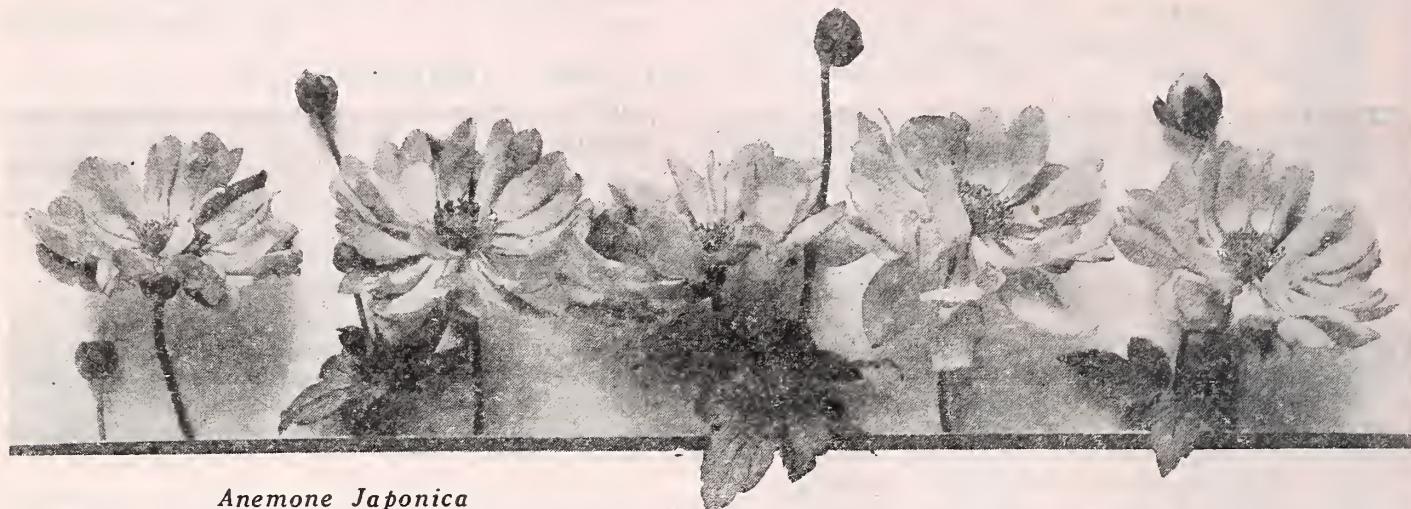


**THEY WILL WIN FOR YOU—See Page 88.**



# PLANT DEPARTMENT

**Bulbs, Annual and Perennial Garden Plants, Dahlias, Roses, Ferns and Pot Plants**



*Anemone Japonica*

## Perennial Border and Bedding Plants

A select list of Border and Bedding plants, beautiful and useful varieties that are easily grown. Fine, large, well-rooted specimens that can be safely packed and promptly delivered in perfect condition. If you contemplate large plantings or special effects, let us know your plans and requirements. We can supply in any quantity for every requirement at lowest prices.

**ALYSSUM SAXATILE COMPACTUM.**— Bright yellow corymbs; showy Spring flowering plant, which also flowers in Autumn. **Each, 20c.**

**ANEMONE JAPONICA.**— Beautiful Fall blooming plants. Pink or white. **20c; 2 sorts, 35c.**

**ANCHUSIA ITALICA.**— Tall growing hardy plant, with pretty blue flowers in large racemes. **Each, 20c.**

**AQUILEGIA HYBRIDA.**— (Columbine). An old favorite for Spring and early Summer. Blue, violet, pink, chocolate. Fine for cut flowers. **Each, 15c.**

**ARABIS ALPINA.**— (Rock Cress) Low growing, fine for bordering. Covered in Spring with white blossoms. **Each, 15c; per dozen, \$1.50.**

**ARTICHOKE.**— Ornamental garden plant, bearing edible buds that develop into giant thistle-like blooms. **Each, 15c; doz., \$1.50.**

**CANTERBURY BELLS.**— Pink, white, blue, large clumps. **Each, 20c; doz., \$2.00.**

**CAMPANULA.**— **New Double White.**— A dainty and beautiful flower, 2 to 2 1/2 feet high, bearing spikes of large snow white, prettily formed, fully double blossoms. Pinch off the old flowers and the plant will bloom continuously. One of the best border or bedding plants ever offered. **Each, 25c.**

**COREOPSIS.**— (Golden Sunbeams). Beautiful golden-yellow flowers on long stems; always in bloom; fine for cutting. **Each, 15c.**

**DAISIES.**— The new Giant daisies have immense flowers, are very free blooming and hardy. Pink or White. **Each, 15c.**

**DORONICUM.**— Early Spring flowering Marguerite-like yellow flowers. Fine border plant. **Each, 20c.**

**ENGLISH PRIMROSE.**— Finest sorts, from pure yellow to deepest crimson-maroon; early, low-growing, fragrant. **Each, 20c.**

**GAILLARDIA GRANDIFLORA.**— Splendid large flowers; combination coloring of yellow, brown, crimson, orange; height, 2 feet; bloom until frost; fine for cut flowers; hardy everywhere. **Each, 20c.**

**GEUM.**— (Atrocinium) A splendid bed or border plant—erect habit—18 to 24 inches—bearing freely, dainty little double red flowers. **Each, 20c.**

**GYPSOPHILIA PANICULATA.**— Single and double; thrives during driest weather; elegant rock plants and very useful for cut flowers. **Each, 20c.**

**HARDY ASTERS.**— Among the showiest of late flowering plants, blooming when most other flowers are past. **Each, 15c.**

**HELIANTHUS SPARSIFOLIA.**— Superb new single sunflower of striking beauty; blooms late in the season. A real gem among hardy plants. We especially urge you to give this a trial. **Each, 20c.**

**HOLLYHOCKS.**— Hollyhocks require good soil, prepared by deep digging and working in well rotted manure; water during dry weather.

**New Double and Single.**— Red, yellow, pink, and white. **Each, 15c; 4 for 50c; large clumps, each, 25c; dozen, \$2.50.**

**PLUMBAGO LAIPENTEA.**— Fine edging plant growing four inches high and covered all Summer with sky blue flowers. **Each, 15c; per doz. \$1.50.**

**RUDBECKIA, Golden Glow.**— Bears in greatest profusion immense, double blooms, large as Dahlias, of the brightest, golden yellow; hardy everywhere. **Each, 15c.**

**RUDBECKIA NEWMANI.**— (Black-eyed Susan). Golden yellow ray petals around a dark center. Fine cut flowers. **Each, 15c.**

**SHASTA DAISY.**— (Alaska). This new "Shasta" is covered with immense, fluffy white blooms, with golden eyes, from July until late Fall; long stems; fine for cutting; one of our best hardy border plants. **Each, 20c.**

**SWEET WILLIAM.**— Old favorites for beds and borders. Brilliant and pleasing colors. **Each, 15c.**

**VERONICA PROSTRATA.**— (Rock Cress). Splendid for rock gardens and edges of borders; color deep blue. Blooms May to August. **Each, 15c.**

**WALLFLOWER.**— (Dark and Light; single and double; mixed), good subjects for rock garden and Spring bedding. **Each, 20c.**

## Hardy Perennial Garden Plants--Continued

### Larkspur—Delphiniums

**HARDY LARKSPUR.**—One of the most beautiful and useful border plants; is a great favorite in the English gardens and their famous specialists have produced magnificent new varieties of rare beauty of form and exquisite coloring; vigorous, free-blooming and hardy. The following named varieties are among the best—and the hybrids are the selection of a famous specialist.

**KING OF DELPHINIUMS.**—Giant semi-double flowers, deep blue with white eye; a vigorous, free bloomer.

**DELPHINIUM FORMOSUM.**—Dark blue with white center.

**PRICES—NAMED VARIETIES—**Fine Large 2-year Clumps. Each, 25c; per dozen, \$2.50. **HYBRIDS—**Each, 20c; per dozen, \$2.00.

### Oriental Poppy

The most brilliant and georgeous of all garden plants; is hardy and succeeds well in any good garden soil, blooming in May and June, they are dormant thereafter until cool weather. We offer two rare and beautiful new sorts, besides the standard red type.

**SALMON QUEEN.**—Rich salmon pink with coppery orange suffusion; deepest purplish black center and markings. A rare and splendid flower of largest size; vigorous and free blooming.

Each, 25c; doz., \$2.50.

**KELWAYS HYBRIDS**—Among the handsomest of garden plants. Each, 20c; per dozen. \$2.00

### Perennial Phlox

**HARDY** as an oak, increasing in beauty each year, few things are as beautiful and satisfactory. The marvelous new colors, beautiful foliage and easy culture, make this choice flower one of the most desirable. We offer the following fine collection, which we have grown. **Price, each, 15c; doz., \$1.50.**

**R. P. STRUTHERS.**—Tall, rosy carmine with claret-red eye; fine.

**EUGENE DANZANVILLIER.**—Tall, lilac, shading white towards the edges; large white center.

**MRS. JENKINS.**—Tall; the best tall early white for massing.

**VESUVIUS.**—Medium; one of the new seedlings; pure red with bright purple eye; a dazzling color.

**SUNSHINE.**—Dwarf; large, aniline-red with crimson-red eye and light halo.

**GEO. A. STROHLEIN.**—Medium bright scarlet with crimson red eye; does not bleach.

**CARAN D'ACHE.**—Medium; geranium-red with old rose shadings and white eye; very effective.

**MME. PAUL DUTRIE.**—Tall; a delicate lilac rose, reminding one of the beautiful soft pink Orchids.

**ANTONIN MERCIE.**—Medium; light ground color; upper half of each petal deeply suffused bluish-lilac, large white halo.

**MAHONY.**—A magnificent flower of the darkest richest color yet known in a poppy, almost a true dark mahogany. Large, free-blooming; a splendid companion to Salmon Queen.

Each, 25c; doz., \$2.50.

**SELMA.**—Tall; large flower; pale rose mauve with claret eye.

**VON LASSBURG.**—Medium; the purest white in cultivation; individual flowers larger than any other white.

**CONSUL H. FROST.**—Medium; pure red with bright French-purple eye.

**COQUELICOT.**—Fine flowering, scarlet, with crimson eye.

**DIADEM.**—Large flowering, pure white — dwarf

**GOLIATH.**—Truly a giant in growth; color, bright crimson carmine, deeper eye.

**PHLOX DIVARICATA CANADENSIS.**—Blooms early April, has large, beautiful lavender flowers; grows 10 inches high.

**PHLOX SUBULATA**—(Moss or Mt. Pink).—Early spring flowering, the foliage being covered with bloom; useful for carpet bedding, cemetery planting or rockeries.

### Sweet Violets

Price each, 15c; 6 sorts, 75c, Postpaid.

**ALASKA.**—A grand sort, well adapted to garden culture, enormous double flowers of a deep blue-black color and powerful fragrance.

**LADY HUME CAMPBELL.**—Large double flowers of a beautiful light blue color; very free-blooming and exquisitely fragrant.

**CALIFORNIA.**—Very showy and beautiful flowers of enormous size, deep violet blue; deliciously fragrant; single.

**PRINCESS OF WALES.**—Flowers single, of gigantic size; color a very rich shade of blue, and extremely fragrant.

**MARIE LOUISE.**—A constant bloomer, producing great quantities of large, double flowers, lovely deep violet purple.

**SWANLEY WHITE.**—The finest and best double white violet in cultivation.

### Flavoring and Medicinal Herbs

**CHIVE.**—Has mild onion flavor, grows in grass-like clumps; much used for flavoring.

Each, 15c; doz., \$1.50

**LAVENDER.**—By distillation produces the well-known Lavender water, the flowers for perfuming wardrobes, etc. Each, 25c; doz., \$2.50

**ROSEMARY.**—Infusions of the leaves are used in medicinal beverages. Produces an aromatic oil. Each, 25c; doz., \$2.50

**THYME.**—Broad leaved, used in soup, stuffing and sauce. Each, 25c; doz., \$2.50

**SWEET MARJORAM.**—The sweet aromatic leaves are used in either the green or dry state. Each, 20c; doz., \$2.00

**SAGE.**—The leaves and tender tops are used in stuffings and sauce; also in the beverage known as Sage tea. Each, 15c; doz., \$1.50

 PRICES ARE F. O. B. PORTLAND. POSTAGE OR EXPRESS AT BUYER'S EXPENSE



## Miscellaneous Flowering Plants

The following list includes many of the most useful and beautiful plants for Baskets, Porch Boxes; Bedding and House Plants.

**ABUTILON ECLIPSE.**— Handsome variegated foliage and bright pendant flowers of scarlet and gold colors. Fine for vases and hanging baskets.

Each, 15c.

**ABUTILON SAVITZI.**— Elegant compact growing plant with pretty fringed foliage of a bright green color, distinctly edged with snow white. Equally desirable as a house plant as it is for bedding purposes.

Each, 15c.

**CINNAMON VINE.**— A beautiful vine of rapid growth, suitable for porches, trellises, etc. One of the very best quick-growing vines.

Large roots, 10c each; 3 for 25c.

**GENISTA RACEMOSA.**— (Shower of Gold). Elegant Spring blooming window plant, literally covered with golden yellow leaves. Each, 15c.

**COLEUS.**— Fancy Leaved — Coleus are the most important of all the fancy leaved bedding plants. They also make very fine pot plants, especially if you have a warm room to Winter them in. Our collection is strictly up to date.

Each, 10c; 6 fine sorts, 50c.

**GERMAN IVY.**— Waxy green leaves, strong growing vine for window and porch boxes or for hanging baskets.

Each, 10c.

**LANTANA, RED AND GOLD.**— Grows eight inches high and is covered all Summer long with large umbels of red and yellow flowers. Certainly a fine Summer flowering plant.

Each, 10c; 12 plants for \$1.00.

**LOBELIA, KATHLEEN MALLARD.**— Covered all Summer long with very large, double flowers of an intense deep blue color. Grand for planting near the edge of flower beds.

Each, 10c; per dozen, \$1.00.

**MARGUERITE MRS. F. SANDERS**— (Annual). Valuable for conservatory or window garden in late winter or spring; excellent bedding plant during summer months; color, pure glistening White, the full fluffy flowers frequently measuring 5 inches across. Each, 15c; per doz., \$1.50

**MESEMBRYANTHEMUM SPECTABILIS.**—

Quilled shaped, succulent leaves with large single thistle-like cerise pink flowers. Fine for baskets, vases or porch boxes.

Each, 10c.

**PRIMROSE.**— (*Giant Obconica*). The freest flowering plant we know of, blooming continuously throughout the entire season.

Each, 20c.

**SALVIA.**— (New Zurich). A distinct and attractive variety of compact dwarf growth, of neatly rounded form, closely set with stiffly erect spikes of bright scarlet flowers.

Each, 10c; per doz., \$1.00.

**SMILAX.**— For using as a green with cut flowers. Fine as a parlor or window plant.

Each, 10c.

**VINCA VARIEGATA.**— Leaves are a glossy green, broadly margined a creamy white. The best of trailing plants for window boxes.

Each, 15c; 2 for 25c.

**VIOLETS.**— Sweet scented double and single varieties.

Each, 10c; 3 for 25c.

**VERBENA.**— (New Mammoth). The Verbena is, next to the Geranium, the most popular of all bedding plants.

Each, 8c; 7 fine varieties, all different, 50c.

## Popular Annual Bedding Plants

During the months of April and May we have thousands of the following bedding plants, price per dozen by express at buyer's expense:

Alyssum.....	\$0.30	Forget-Me-Not .....	1.00	Marigold.....	\$0.30	Salvia.....	\$0.50
Asters.....	.30	Geraniums ...	75c to 2.00	Mignonette.....	.50	Stocks.....	.30
Carnations.....	.60	Heliotrope.....	.50	Petunia.....	.50	Verbena.....	.30
Cosmos.....	.30	Lobelia.....	.30	Phlox.....	.30		

For description of these flowers, see Flower Seed Department.

## Mastodon Pansies

### "Mastodon Pansies" in Bloom

From March until June we offer our famous "Mastodon" Pansy plants in full bloom—none finer in the world. Put up one dozen in a basket.

Price, 60c to \$1.00 per basket by express, buyer to pay charges. They will surprise and delight you.

### Giant Pansies

**NEW GIANT PANSIES.**— Our Giant Plants are in a class of their own and can not be compared to any other Giant Pansies, no matter where grown. We know they are unsurpassed in this or any other country. A trial basket will convince you. They are the best value ever offered in a bedding plant.

Each, 5c; per dozen, 50c; by mail, 75c dozen.

### MASTODON PANSY SEED

We offer a limited amount of this hand selected seed, DIAMOND MIXED

Per pkt., 25 cents

Large Trade pkt., \$1.00



PAEONY DAHLIAS are best for garden effects. They also have long stems and keep well when cut.

SEE PAGE 92.



**OFFICINALIS RUBRA**—Flowers of a bright scarlet crimson; quite double and globular; very early, rare and fine.

Each, 30c.

**COURONNE D'OR**—A superb whiteflower of immense size, reflects yellow, center petals bordered carmine, a perfect flower of great beauty, very fragrant, free blooming and vigorous; late.

Each, 75c.

**MAD. BREON**—A beautiful variety with good growing qualities; flowers outside flesh, center lemon, occasionally carmine tipped when first open; entire flower gradually changing to pure white.

Each, 60c.

**DELACHEI**—Large full flower of a deep rich crimson, purplish tone; a free blooming thrifty grower, very fragrant; medium to late.

Each, 35c.

**OFFICINALIS ALBA**—Blooms with Officinalis Rubra; flowers large and handsome. When Alba first opens it is light pink, fading to white as flowers get older.

Each, 30c.

THESE beautiful and interesting plants can be easily grown in tubs made by cutting a barrel in half and setting one or both halves deep in the ground, to within a few inches of the top. Put in good loam soil, with one-third old manure, or better still is the soil from a swamp or lowland, using one-third of old, well-rotted manure; cover soil with a layer of sand one to two inches deep, allowing for a depth of six inches of water. Water Lilies like a mild temperature, and still water, and will not succeed where a fountain is playing or where there is a strong or cold inflow.

**NYMPHAE**.—Hardy white.

Single roots 35c, postpaid.

Large roots, 75c to \$1.50, prepaid.

**NYMPHAE**.—Hardy yellow; fragrant.

Single roots, 50c, prepaid.

Large roots, \$1.50, prepaid.

### Begonias—Tuberous Rooted

**SINGLE FLOWERING**—These are of immense size, free blooming and very lasting.

Price, each, 10c; doz., 85c; 100, \$6.00

**DOUBLE FLOWERING**—Often as full and beautiful as a rose, some of the white varieties resembling giant carnations. Price, separate colors:

Each, 20c; doz., \$2.00.

## PAEONIES

Double Herbaceous

THE development and increase in popularity of the Paeony has been unparalleled among flowers, and the profusion and duration of bloom, combined with handsome, massive foliage, accommodating habit, and easy culture, render them one of the most popular hardy plants grown for lawn and garden decoration.

Paeonies are always free from disease and insects do not bother them. They are hardy, thrifty growers, bloom freely, and nothing will add more to the beauty and attractiveness of the lawn.

**FESTIVA MAXIMA**.—This superb variety is easily the most popular and valuable Paeony. Its flowers, of rare beauty and great size, are perfectly double, pure white, tipped or flaked with a small crimson spot at center; petals fine as summer silk; finest white in cultivation; strong roots. Each, 75c; large specimen plants, \$2.00.

**DELICATISSIMA**.—Light rosy apricot, sometimes margined carmine red. Each, 40c.

**OFFICINALIS ROSEA**—Beautiful bright pink globular flowers, blooms with Officinalis Alba and Rubra. These splendid early bloomers produce fine flowers for Decoration Day. Each, 30c.

**MAD. DE VERNEVILLE**—Broad outside petals, sulphur white, with center rosy white, sometimes edged carmine, and beautifully imbricated; an exceptionally fine full flower, with the sweet fragrance of the rose. One of the earliest. Each, 50c.

**POTTSI-ROSEA**.—Rich deep rose, lighter center. Each, 40c.

**FRAGRANS**.—Late; color deep rose; fragrant and a very prolific bloomer; tall grower. Each, 40c.

**QUEENS PERFECTION**.—One of the finest of the creamy flesh whites, large, full and attractive. Each, 40c.

### Paeony Moutan (Tree Paeony)

Grows about four feet high, forming a small tree-shaped shrub. When this plant becomes well established and is covered with dozens of massive blooms it presents a magnificent display. We have Crimson, Pink, Scarlet, Rose and Variegated.

**STRONG IMPORTED ROOTS**, from January to May, by express at buyer's expense (too heavy to mail.) Each, 75c.

### Water Lilies

Produces long trailing sprays of lovely green, finely cut foliage set in symmetrical whorls; plant in a water tight vase or hanging basket, keeping water standing over the surface. A beautiful, thrifty growing, hardy plant. Try it.

Good roots, each, 25c; doz., \$2.50.

### Parrots Feathers

FRILLED—Single frilled, having a heavy frill or fringe on the edges of the petals.

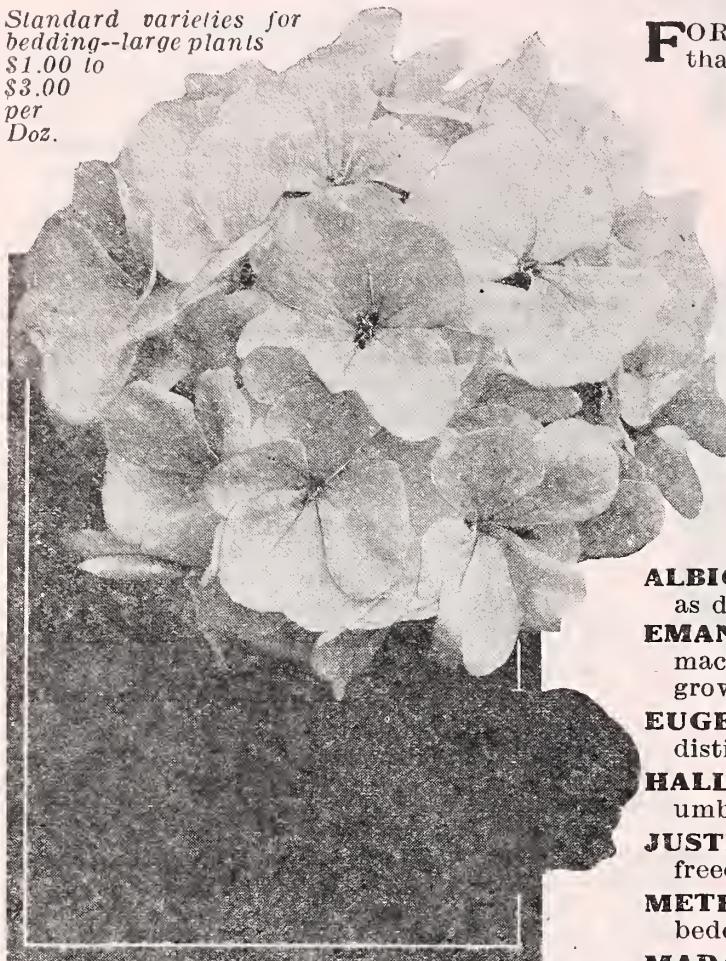
Each, 20c; doz., \$2.00; 100, \$15.00

OUR DIAMOND MIXTURE, containing all of above sorts. Per doz., \$1.50; 100, \$10.00



## GERANIUMS

Standard varieties for bedding--large plants \$1.00 to \$3.00 per Doz.



**VICTOR GROSSETT.** — Rich apricot bordered on vermillion; profuse bloomer and excellent habit. A splendid bedding sort.

**F**OR winter flowers inside nothing is more satisfactory than Geraniums. They are of the easiest culture, requiring to be kept cool and given plenty of air, with an occasional sprinkling of the foliage to clean and freshen it. Keep the roots moist, not too wet, and have good drainage in the pots. No other flower can take their place as a bed or border plant, and inside they grow beautifully throughout the year, making cheery house plants.

Our low prices place these choice new varieties within reach of everyone.

### Choice New Single Geraniums

Price, 15c each; set of 10 sorts, \$1.25; Postpaid, \$1.35.

**ADMIRATION.** — Gorgeous flowers of a bright shrimp pink, shading to white center. Immense trusses of beautifully formed flowers.

**ALBION.** — Beautiful free flowering white variety, as pure as driven snow. Always in bloom.

**EMANUEL ARENE.** — Rich, dark velvety crimson maculated orange red; immense trusses, very strong grower.

**EUGENE SUE.** — Odd shade of russet orange, very distinct.

**HALL CAINE.** — Very large round florets in numerous umbels. Light rich scarlet.

**JUSTE OLIVER.** — Bright carmine flowers in great freedom; very effective.

**METEOR.** — Brilliant crimson maroon. A magnificent bedding variety.

**MADAME MOSNAY.** — A peculiar shade of lake, shaded to violet and white; very odd.

**NUIT POITEVINE.** — Trusses and florets of grand size; rich, rosy violet; the upper petals feathered with scarlet at their base. Very distinct and much admired.

### Twelve Fine Single Geraniums

Price, 10c each. Set of 12 sorts, \$1.00; postpaid, \$1.10.

**BELLEROPHON.** — One of the freest blooming single scarlet bedding varieties; rich, glowing scarlet, crimson maroon shading on upper petals.

**C. W. WARD.** — Rich salmon shaded orange color. Very effective.

**JAMES KELWAY.** — Brilliant scarlet, of the most dazzling shade; very large trusses and florets.

**JACQUERIE.** — Rich, vivid crimson, immense trusses.

**MAD. CHAPOTAN.** — Delicate light pink, large flowers; nice foliage; specially desirable as a pot plant.

**MILDRED RIVAL.** — Pure rose pink, with conspicuous white blotch on two upper petals.

**MME. CIBIEL.** — Light salmon, bordered rosy salmon. Grand trusses of very large florets.

**MAXINE KAVOLENSKI.** — Odd shade of orange red; very distinctive, splendid bedder, vigorous, handsome; a dependable sort.

**MRS. E. G. HILL.** — Very large trusses of single florets; color clear salmon, with a white center.

**MRS. J. M. GARR.** — Trusses large and of perfect form; color pure snowy white.

**MRS. A. BLANC.** — Light salmon, blended with darker shades; center and edge of petals pure white; extra fine.

**TIFFIN.** — Brilliant scarlet of the most dazzling shade; very large trusses and florets.

### Ten Choice New Double Geraniums

Price, 15c each. Set of 10 sorts, \$1.25; postpaid, \$1.35.

**ABBIE SCHAEFER.** — Beautifully formed florets in fine, large trusses; color, rich crimson-scarlet, of velvety texture. One of our finest new sorts.

**E. H. TREGO.** — A most beautiful shade of dazzling scarlet, with an exquisitely soft, velvety finish.

**MADAME LANDRY.** — Distinct salmon pink. Lightly shaded scarlet. Magnificent trusses.

**MADAM BARNEY.** — Lively deep pink flowers of fine size.

**MME RECAMIER.** — Snow white; strong, vigorous grower; flowers abundantly produced in large trusses.

**MRS. LAWRENCE.** — Beautiful satiny pink shaded to white; a gem among geraniums.

**MRS. VINCENT.** — Bright carmine, each petal marked white at center; dwarf, robust habit; very free in growth and bloom.

**ORNELLA.** — Intense bright scarlet. A grand bedding variety.

**SEDUCTEUR.** — Rich, bright salmon-pink, shaded to white. Trusses of fine size and form. A grand bedding variety.

**SUZANNE DESPREZ.** — Snow white, distinctly bordered with pink. Very striking.



## GERANIUMS—Cont'd

### Twelve Fine Double Geraniums

Price, 10c each; set of 12 sorts, \$1.00. Postpaid \$1.10.

**ALPHONSE RICARD.**— Immense trusses of large round flowers of the most vivid scarlet.

**BEAUTE POITEVINE.**— Very large, semi-double flowers of a brilliant salmon color. One of our best sorts.

**CONTRASTE.**— Glowing carmine, shaded darker; one of our best bedders.

**FRANCOIS MAGNARD.**— Fine, bright magenta shade, flowering very freely in large trusses of well-opened flowers.

**FRANCIS PERKINS.**— The finest pure pink variety we know of.

**GOLDEN DAWN.**— Color brilliant orange with brighter shadings; the nearest approach to yellow.

**HETERANTHE.**— A fine bedding variety. Color, bright vermillion-red, of a most pleasing shade.

**JEAN VIAND.**— Soft rose color, shaded to white. Magnificent bedder.

**LA FAVORITE.**— Trusses very large; flowers pure snow white.

**LE CID.**— Lovely rich scarlet flowers; very large trusses.

**MARQUISE de CASTELLANE.**— Rich salferino red in immense trusses. Very fine sort.

**S. A. NUTT.**— The best of the rich, dark crimson varieties; trusses massive.

## Pelargoniums—Lady Washington Geraniums

**EASTER GREETING.**— Beautiful new variety, remarkable for its free blooming proclivities, being equally as fine bedded out as it is grown as a pot plant. The flowers are of a fiery amaranth red each petal distinctly blotched maroon. A novelty of the greatest merit.

Each, 30c.

**MRS. LAYAL.**— This is the popular pansy geranium covered with its small, rich colored flowers in chocolate, pink and white. Each, 20c.

We offer a splendid assortment of the popular **Lady Washington Geraniums**, large sizes for bedding.

\$1.50 to \$3.50 per doz.

## New Heliotropes

Price, 15c each; set of 4, 50c, postpaid.

**ALBATROSS.**— Elegant dwarf, bushy growing, new variety of great merit; large panicles of pure white flowers in great profusion all season: the best white variety to date.

**HEAVENLY BLUE.**— Large, close panicles of exquisite light blue flowers, with a white eye. Grows vigorously and flowers abundantly; very fine for bedding, for which purpose we offer it at \$1.00 per dozen.

**LAVENDER QUEEN.**— Enormous florets, very large trusses of bloom; color, a beautiful shade of lavender, suffused with rosy mauve. A dwarf, robust grower and a free and continuous bloomer.

**ROYAL PURPLE.**— Very large and fragrant; color deep violet purple, with white eye; very floriferous and can not be too highly recommended for bedding, for which purpose we offer it at \$1.00 per dozen.

## Six Beautiful Flowering Begonias

Price, 10c each; set of 6 sorts, 50c, postpaid.

**ALBA PICTA.**— A strong growing variety, with pointed dark green leaves; profusely covered with pure white spots. Pretty white flowers.

**ARGENTEA GUTTATA.**— Handsome erect growing sort, with pointed wine-colored leaves with silvery white spots; clusters of pure white flowers on the tips of the stems.

**CUPREA.**— A fine, erect Begonia, with dark, rough leaves. The panicles of unopened flowers are bright red with surfaces like plush.

**FOLIOSA.**— The freest-flowering Begonia we have. Makes a handsome window plant, with its glossy green leaves and bright pink flowers.

**MARGUERITE.**— Bronzy green, with purple cast; large trusses of cream and rose-colored flowers.

**MARJORIE DAW.**— Strong growing sort with glossy green leaves, producing large panicles of bright salmon pink flowers dropping gracefully about the plant.



REX BEGONIA

## REX BEGONIA

Grown for the beauty of their foliage. The leaves are large, variegated and margined with a peculiar silver-metallic gloss. The most ornamental of window plants; also useful in baskets and vases. We offer twenty of the most distinct and handsomely marked varieties.

Price, choice plants, each, 25c.



For Tuberous Rooted Begonias, see Page 99.



## Seven Choice Novelties in Carnations

"American Carnation Culture" Lamborn  
\$2.00 Postpaid



**PINK DELIGHT.**—A grand new variety bearing profusely on long stems, crisp wax-like flowers of a delicate flesh pink shade. A beauty.

CARNATIONS will thrive in any good fresh garden soil. After danger of frost is over, set 10 to 12 inches apart each way, cultivate and water as needed until they begin blooming, then mulch with light manure that has straw in it, plants should be staked or strung to support them. Carnations are easily grown in the house for Winter flowers.

For Finest Carnation Seed See Page 59

Price, 20c each; set of 7 sorts, \$1.20 postpaid

**BONORA.**—A beauty; fancy variety of fine size and form, borne on long, stout stems. Color white flaked and splashed with red.

**HERALD.**—Flowers very large and massive with finely fringed petals and strong calyx. Stems long and very stout; color bright rich scarlet. A true everbloomer.

**GORGEIOUS.**—Luxuriant growing new carnation of giant proportions. Very long straight stems surmounted by large, finely fringed flowers of deep carmine, shaded to rich velvety scarlet. A giant among carnations.

**MATCHLESS.**—A wonderful new white variety produced by a famous hybridizer of New York State. Large massive flowers on strong upright stems. Sweetly perfumed.

**PHILADELPHIA.**—Greatly admired for its beautiful soft rose pink flowers. Very delicate and pretty.

**PRINCESS DAGMAR.**—A grand, new, ever-blooming carnation, producing very large flowers of a rich, crimson maroon color. A wonderfully free bloomer. Its rich, velvety color will make this sort immensely popular.

## Standard Everblooming Carnations

Price: 15c each; 4 for 50c; set of 12 fine varieties, \$1.25, postpaid.

**AFTERRGLOW.**—Flowers of excellent form, produced on long, wiry stems; a beautiful shade of deep cerise, a popular shade in Carnations at present.

**BEACON.**—A bright, deep scarlet; a most perfect color, soft yet brilliant; the flower is of the largest size and perfectly double; nicely fringed; sweet.

**BOUNTIFUL.**—Color pearly white, very large, with heavy glistening petals, delicately fringed; very fragrant.

**ELDORADO.**—Deep golden yellow, splashed and striped with red; a very rich combination of colors and a novelty of much merit.

**DOROTHY GORDON.**—Very large, rose-pink flowers on fine long stems. A beauty.

**ENCHANTRESS.**—Flowers very large, borne on long stems. The color is a superb shade of flesh pink. An early and continuous bloomer.

**MAY DAY.**—This Carnation has that exquisite shade of pink so greatly in demand. Form, size and calyx grand.

**MRS. C. W. WARD.**—Simply superb, both in form and color; brilliant dark pink, of immense size.

**PRESIDENT ROOSEVELT.**—Magnificent, bright rich crimson; large, perfectly double flowers.

**VICTORY.**—Regarded by many as the finest scarlet Carnation. In color it is the most intensely brilliant scarlet; stems long and firm, holding the flowers upright.

**WHITE ENCHANTRESS.**—A pure white sport from the famous variety Enchantress, having the same general habit and characteristics. A superb flower.

**WINSOR.**—This variety has been greatly admired wherever it has been seen for its desirable color, being a beautiful delicate shade of pink; flowers of large size and very freely produced; plant of grand habit and vigorous growth.

 **FLORISTS** write for prices on Carnation Plants. We can supply best commercial varieties in season, or will grow to your order, any special variety. Large, healthy, well rooted plants at right prices.

**FEED YOUR PLANTS** -- Diamond Plant Food is the proper diet, makes them grow, improves their color and lasting qualities. A 25c package feeds a dozen large house plants a whole year--See page 53.

## Grand Novelties in Japanese Chrysanthemums

Price, 15 cents each; 4 sorts, 50 cents; set of 10, \$1.00.

**ARTISTIC QUEEN.**—Fine exhibition variety. Extra large blooms, loosely incurved, very strong stem. Color, rose-pink, very fresh and beautiful.

**ETHEL FITZROY.**—Extremely beautiful color, rosy, golden bronze; very thrifty, with nice big, incurved blooms.

**GEORGE BRUZZARD.**—A beautiful shaped bloom; bronzy red in color with reverse side of petals old gold, a contrast which is at once distinct and striking.

**GENERAL HUTTON.**—A grand sort viewed from any of the points which go to make it a perfect flower. Large in size, perfect in form and a superb golden bronze color.

**HARVARD.**—The darkest chrysanthemum extant; when well grown it produces a good medium sized bloom of the darkest shade of crimson it is possible to imagine.

**PINK GEM.**—A beautiful broad-petaled, incurving variety, round and ruffled; one of the prettiest forms in the family.

**RAMAPO.**—Golden yellow; the overlapping foliage and richly colored flowers produce an effect which is beautiful in the extreme.

**THOMAS CARRINGTON.**—An enormous exhibition variety with perfectly double flowers. Petals rather narrow and gracefully incurved. Color, rosy purple.

**WILLIAM TURNER.**—Pure white in color, and we have never seen anything larger or more impressive for the exhibition table. It is enormous in diameter, deep in build and very perfect in form. This fine variety swept everything before it on the exhibition tables the past season.

**NAOMAH.**—Incurved white. Petals broad and incurving. Flowers of excellent substance and stems clothed with heavy foliage.

## Twelve Finest Exhibition Chrysanthemums

Price, 10c each; set of 12 sorts, \$1.00. Postpaid.

**CHRYSOLORA.**—In our field trials during the past season this variety stood out pre-eminently as the finest yellow in the collection. Large, incurved flowers of elegant form.

**CHARLES RASER.**—Elegant, snow-white, incurved blooms of fine size and build. Comes on long, stout stems grandly clothed with luxuriant foliage. One of the finest new sorts.

**C. H. TOTTY.**—Large, fluffy flowers of a glowing chestnut scarlet; reverse of petals shaded gold. This grand sort impresses us as being the very finest red variety to date. Simply superb.

**CLEMENTINE TOUSSET.**—Creamy white, delicately laced with lilac and lavender; petals beautifully twisted and arranged. Fine large flower.

**COLONEL APPLETON.**—Rich, golden yellow, immense size, very double; a grand, well-built flower, with splendid stem and foliage. A sure prize-winner.

**DR. ENGUHARD.**—Flowers delicate pearl-pink; large, beautifully incurved; very double and of exquisite form.

**MAJOR BONNAFFON.**—Soft, clear yellow, full in the center, eight inches in diameter and nearly as deep; perfect form.

**MATCHLESS.**—Largest and most beautiful dark crimson scarlet yet raised; looks like crimson velvet; the color long desired. Superb in the garden.

**PIONEER.**—Color a beautiful shade of Enchantress, or flesh pink. Perfectly incurved flowers of remarkable waxy appearance. Sturdy grower with handsome, leathery foliage. A fine thing.

**POLYPHENE.**—A gem in every sense of the word; magnificent in size, form and color. Its informal character of build and rich canary yellow color need only to be seen to be appreciated.



**ROMAN GOLD.**—In this fine variety we have secured a sort which for richness of color excels all other yellow varieties to date. Comes shaded with bronze in cool weather.

**TIMOTHY EATON.**—The largest globular Japanese incurved variety yet raised. Form round and perfect; color, creamy white; growth, vigorous, with large, dark green foliage.

## Free Blooming Fuchsias

Price, 10c each; set of 6 sorts, 50c.

**ANNA EARLE.**—Tube and sepals waxy white; corolla single, clear carmine; plants splendid and free blooming.

**DR. BROOKS.**—Rich, dark blue corolla, with crimson petals. A beautiful variety.

**MOLESWORTH.**—Fine, large and elegant form, sepals long and reflexed, pure red; corolla large double white.

**GENERAL ROBERTS.**—Flowers very large; corolla plum color; tube and sepals crimson.

**JUPITER.**—This is a grand mammoth double flowered Fuchsia; flowers of enormous size, very large, rich purple violet corolla; tube and sepals bright crimson.

**SNOWSTORM.**—The freest flowering double white variety.



WE offer a splendid list of Ferns, including some of the newest varieties as well as the older sorts. All plants are in fine growing condition, and well rooted. Florists wishing stock of the new varieties write for prices.

### Nephrolepis or Boston Ferns Post paid when noted only:

**PRICES:** Nice Plants 25c each; Large Plants 50c to 75c; Specimen Plants \$1.50 to \$3.00, postpaid

**N. AMERPOHLII.**—This charming "Lace Fern" is so finely "crested" as to have a fluffy lace-like appearance, and is the most beautiful and attractive "sport" from the Boston Fern; an ideal plant for house or table decoration.

**BOSTON FERN.**—This is the original and well known type of "Sword Fern."

**N. ROOSEVELT.**—Resembles Boston Fern; produces many more fronds, making a bushier and handsomer plant.

**SCOTT FERN.**—(*Nephrolepis Scottii*)—Identical with the original Boston type, but is dwarfed with a more compact and bushy habit of growth.

**OSTRICH PLUME FERN.**—(*Nephrolepis Whitemani*). One of the most wonderful and beautiful introductions of the present age; this new sort is a sport from the well known Boston Fern; has a beautiful feathery appearance, and is one of the grandest of decorative house plants.

### New and Popular Ferns

**ASPARAGUS PLUMOSUS.**—(Climbing Lace Fern). A finer and more delicate plant than the Sprengerii, but hardy and easily grown; the fronds retain their freshness for weeks when cut.

**Nice plants, each, 15c; large plants, 25c to 50c. Add 10c if by mail.**

**ASPARAGUS SPRENGERII.**—(Emerald Feather) Handsome and valuable evergreen trailing plant for the house or conservatory; its beautiful sprays of lovely green, feathery foliage can be cut freely. **Nice plants, each, 15c; large plants, 35c to 50c. Add 10c if by mail.**

**PTERIS WILSONI.**—One of the daintiest and most useful of this interesting class, the crested tips of the fronds giving it a distinctive appearance. Suitable for fern dishes or specimens.

**Prices: Nice Plants 25c; Larger Plants 50c to 75c.**

**FOR FERN DISHES.**—Attractive assortments. sufficient for 5 to 6 inch pans.

**75c to \$1.00, postpaid.**

**MAIDEN HAIR.**—(*Adiantum Cuneatum*). This is the hardy Maiden Hair Fern so valuable to florists for cutting, grows freely under almost any condition inside; it is a sure grower.

**Good plants from 4-inch pots, \$1.00 postpaid.**

**CYRTOMIUM ROCHFORDIANUM.**—Foliage of a rich deep glossy green color; the leaflets besides being wavy, are also deeply cut or toothed; valuable for a dish fern and for decorative work. **Prices: Small plants, 25c; from 4-inch pots, 60c, postpaid.**

### Japanese Fern Balls

**DIRECTIONS FOR STARTING.**—Place ball in water for 15 minutes, and then suspend in any desired position, or place in a shallow dish; repeat every two days until growth is started, after which sprinkle occasionally as required. **Price of Balls in dormant state, large size, each, 75c; small, 50c.**

### SPECIAL—Six Fine Table Ferns for \$1.00 Price 20c each; 6 sorts for \$1.00. Extra large plants, 50c each, postpaid.

**ADIANTUM CUNEATUM.**—Maiden Hair Fern. A very beautiful and graceful fern.

**ASPIDIUM TAUSSIMENSE.**—Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit.

**BOSTON FERN.**—See description above.

**CRYTOMIUM FALCATUM.**—(The Holly leaved fern). One of the most desirable; with hardy, dark green foliage.

**PTERIS CRETICA ALBO-LINEATA.**—A pretty and useful variegated variety, distinctly showing the clear white variegation.

**OSTRICH PLUME.**—See description above.

### HARDY FERNS—For Shady Borders and Rock Work PRICES: Nice plants, 25c and 50c each. Trial Collection, \$1.25, postpaid.

**EVERGREEN WOODFERN.**—(*Dryopteris Marginalis*)—Marginal shield fern; most valuable of the hardy evergreen ferns for garden.

**QUEEN OF LADY FERNS.**—(*Asplenium Victoriae*)—A vigorous rapid grower; one of the best of the "Lady Ferns."

**NATIVE OREGON SWORD FERN.**—Makes imposing specimens in borders or in tubs. Prefers partial shade.

**HARTS TONGUE.**—(*Scolopendrium vulgare*)—Easy of cultivation; very distinct and attractive.

**FIVE FINGERED LADY FERN.**—(*Adiantum Pedatum*)—Most graceful and beautiful hardy maiden hair fern.

**POLYSTICHUM VIVI QUARA.**—A rare and wonderful fern of great beauty, the long, graceful fronds having a fine mossy coat, from which miniature ferns, exact counterparts of the parent plant, spring in great profusion, and after getting well started can be removed and potted.

# Palms and Ornamental Plants



**PALMS** lend to their surroundings an atmosphere of elegance and completeness, and with proper care will thrive in any home, making the most magnificent and useful decorative plants.

**CARE OF PALMS.**—Good garden loam, with a little sharp sand, is the best soil for palms, and good drainage is of first importance—do not keep a palm too wet. If you set the pot in a jardiniere put some thing under the pot to let the water drain through. Never let the water stand around the bottom of the pot. Water thoroughly, but let it drain off, then when the soil begins to look dry give another good wetting. It is important to keep the soil of any pot plant moist—clear through—but not wet like mud. One other important point: Soil must have light; palms and some plants would do well without strong light, but the soil would soon sour and fail to nourish them, therefore, when not actually in use keep them as near the windows as possible, but not in the hot sun.

Bone meal is the best fertilizer; a tablespoonful to a 7-inch pot is a good portion. Dig well into the soil. Apply when new growth shows. Do not repot as long as they are doing nicely. And when you do, transfer gently to the larger pot and fill the soil around the roots, disturbing them as little as possible. Palms do best in comparatively small pots. Shower them with water twice a week and should they show signs of scale, wash with strong soap and water or kerosene emulsion (a pound of soap melted with a half pint of kerosene thoroughly stirred into it) Dilute this with ten parts of water and apply with a cloth or brush.

## Choice Palms for Table and House Decoration.

**PHOENIX ROEBELENII.**—A new and graceful miniature "Phoenix" fully equaling in beauty the *Cocos Weddeliana*, hardy as the *Kentia*. Of vigorous, bushy growth. **Price, choice plants from 4-inch pots, 60c to \$1.00.**

**KENTIA BELMOREANA.**—A beautiful, strong growing Palm with deep green, crisp foliage; inclined to dwarf and spreading habit; one of the most popular for house culture, as they are very hardy. **Small plants, 50c to 75c. Large plants, 18 inches up, \$1.50 to \$5.00 and up.**

**RHAPIS HUMILIS** — Rare ornamental Palm with slender, graceful leaves; very handsome and attractive; an excellent decorative variety, requiring very little sun. **Each, \$1.50 to \$5.00 up.**

**CHAMAEROPS EXCELSA** (See cut No. 3) — Leaves fan shaped, deeply cut; one of the hardiest Palms we have and worthy of extensive culture; very handsome palmate leaves. **Choice plants, 18 inches and up, each, \$1.50 to \$3.00.**

## DRACAENAS

**D. INDIVISA** — This is the popular hardy *Dra-  
caena* that is used so extensively for centers  
of vases, baskets, boxes, etc. Of graceful form.  
and stands full exposure to sun. **4-inch pots  
35c; 5-inch pots, each, \$1.00.**

**D. GRACILIS.**—Graceful foliage; plant having a  
red stripe on slender green leaf; smaller grower  
than D. Indivisa. **Each, 50c to \$1.00.**

## PANDANUS VEITCHII

Graceful foliage plant; broadly striped cream on  
green ground; one of the finest decorative house  
plants. **Each, \$1.00 and \$1.50.**

## ASPIDISTRA.

Ornamental foliage, plant throwing up shoots  
which unfold, developing into long, graceful leaves;  
color a beautiful dark glossy green; give same treat-  
ment as hardy palm.

**VARIEGATED.**—Rich, creamy markings, **\$1.50  
up.**

**CYCAS REVOLUTA, SAGO PALM** (See cut No. 1).—Valuable for lawn and house decorations; they have a thick trunk, and their heavy, glossy, deep green pinnate leaves resist alike the gas, dust and cold to which decorative plants are frequently exposed; fine plants, 18 inches and up. **Each, \$2.00 to \$5.00 and up.**

**LIVISTONIA CHINENSIS** (See cut No. 4)—A useful Palm for decorative work, for apartments or conservatories; leaves large, fan shaped, of a rich dark green color: graceful and quick growers, 12 to 18 inches. **Each, 75c to \$1.00.**

**CHAMAEROPS FORTUNEI**—(See cut No. 2).—A handsome Palm, similar to the above, more dwarf in growth and with smaller leaves. Choice plants, 18 inches up, **Each, \$1.50 to \$3.00.**

**COCOS WEDDELIANA** — The most graceful of all Palms; finely cut foliage of rich deep green; we have fine plants of this most desirable Palm, well established in 4-inch pots, 5 to 7 leaves. **Each, \$1.00. Nice specimen plants, \$2.50 up.**

## UMBRELLA PLANT

**CYPERUS, (Alternifolia)** — A splendid house plant of easy culture; resembles a palm; requires little or no attention, and remains green throughout the year. Keep well watered. **Small plants, postpaid, each, 15c to 25c. Large plants, by express, each, 35c to \$1.00.**

## ARAUCARIA EXCELSA

(Norfolk Pine.) This beautiful plant resembles the pine somewhat in appearance, though much finer in texture; does not require much sun, are hardy and easily cared for. **Choice plants, 14 to 20 inches high, each, \$2.00 to \$4.00.**

## RUBBER PLANT.

**FICUS ELASTICA.**—This is certainly one of the best plants grown for decorative purposes; it succeeds well with ordinary treatment.

**Large plants, each, \$1.00 to \$1.50 up.**



# IRIS



## Single Varieties

**YOMO-ZAKURA**—Light ground, densely veined and suffused purple.  
**O-YO-DO**—Dark violet.  
**ISO-NO-NAMI**—Silvery white, veined violet.  
**SHINOGO**—White.  
**YJINO**—Reddish purple, mottled and veined white.  
**NAMED VARIETIES.**  
 Each, 20c; doz., \$2.00; 100, \$15.00.

## Japanese Iris (Iris Kaempferi)

Japan Iris is the largest and most wonderful of the Iris family, no flower of any kind surpassing its rare beauty of form, brilliancy and variety of coloring, ranging from snow white through maroon, violet, and deep blue; striped, variegated, veined and blended in the greatest profusion, producing effects that are truly marvelous and indescribable. Blossoms early summer. Japan Iris succeeds best in moist location, but will thrive in any good garden soil. Plant three inches deep, about 4 inches apart; divide the clumps every two years. Fertilize established beds while dormant using stable manure, but do not apply after growth starts. There are hundreds of varieties, from which we have selected the following:

### Double Varieties

**HANA-AOI**—Bright violet blue shaded white to center.  
**OSHO-KUN**—Navy blue, purple center, late.  
**WAKA-MURA-SAKI**—Crimson, purple, blue shadings and blotches in center.  
**SENJO-NO-HORA**—Mottled and veined, red, purple and white.  
**KUMOMA-NO-SORA**—White, with a strongly marked sky-blue zone and mottled in the same shade.  
**YEZO-NISHIKI**—Deep rich crimson, mottled and blotched white, 3 standards same color.  
**KUMA-FUNJIN**—Purple overlaid with navy blue, 2 standards, very large orange blotches.  
**KUMO-NO-OBI**—Dark lavender purple, large handsome flower, 3 petals.  
**MIXED, GOOD ASSORTMENT.**  
 Each 15c; doz., \$1.50; 100, \$10.00.

## German Iris

German Iris is one of the best of the early spring flowers, is hardy everywhere, and if planted in a moist situation or watered freely, will produce magnificent orchid-like blooms of great size and delightful fragrance. Comes in charming color effects in blues, browns, yellows, purples, white.

**CELESTE**—Satiny blue.  
**FLORENTINE ALBA**—White.  
**PALLIDA DALMATICA**—Extra large, lovely true lavender, delightful fragrance, free flowering, fine for massing or as a cut flower.

Prices: **CHOICE ROOTS** Each, 15c; doz., \$1.50; 100, \$10.00.

## Miscellaneous Ornamentals

### Yucca

**SPANISH BAYONET OR ADAM'S NEEDLE**—Has a fine appearance; the stems grow two or three feet above the ground; covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork.

**FILAMENTOSA**—Thread leaved, creamy white; July. **Plants, 2 feet, each, 75c to \$1.00.**

### Bleeding Heart

**SPECTABILIS.** One of the most ornamental of hardy spring flowering plants, with elegant green foliage and long, drooping racemes of heart-shaped flowers. This is deemed one of the finest of all hardy garden plants.

**Strong roots.....Each, 30c, postpaid.**

### Pampas Grass

A noble ornamental grass, easily grown, producing long, pointed leaves and majestic, silvery white plumes, which are very valuable for winter decoration; grows 6 to 8 feet high.

**Strong roots, each, 60c to 75c.  
 Large specimen plants, \$2.00 to \$5.00.**

### Tritoma—(Pfitzeri)

#### Everblooming Flame Flower or Red Hot Poker

This new sort is of a rich orange-scarlet, blooming from mid-summer to latest fall; spikes 3 to 4 feet high; one of the very best of this useful class, which is hardy with slight protection, but winters best if lifted and stored in sand. These hardy perennials are unsurpassed as border plants or for mass effects.

**Strong flowering roots 25c; doz., \$2.50 prepaid**

### St. Johns Wort

(*Hypericum Moserianum*)

Low growing with yellow blooms; a drought resister. July and August. **Clumps, 50c.**

### Caladium

**Esculentum**—(Elephant's Ear) Grand tropical looking plant. A favorite for specimens on the lawn, or for bordering large sub-tropical groups. In deep, rich soil, if freely watered, they produce enormous leaves, frequently four feet long by three feet wide. Plant in the spring. Height, 4 to 5 feet. **Each. 25c; doz., \$2.00**

## HARDY FERNS for SHADY BORDERS and ROCKWORK.

6 BEAUTIFUL and USEFUL VARIETIES—TRIAL COLLECTION FOR \$1.25—SEE PAGE 104

# Climbing Vines

## CLEMATIS

Clematis is one of the most beautiful and useful climbers, the several varieties adapting themselves to every requirement. Their magnificent flowers, borne in great profusion in beautiful shades of lavenders, purples, reds, and white, make them especially attractive. Clematis requires a rich loamy soil, but manure should not touch the roots. Cut out the weak and surplus branches in the spring, and tie the vine up well to its support. We offer the best of the hardy large flowering varieties.

**DUCHESS OF EDINBURGH**—Double, white.

**LAWSONIANA**—Light blue.

**VILLE DE LYON**—Red.

**RAMONA**—Beautiful lavender, best of its color.

**MONTANA**—White, anemone-like flowers, May to July; very hardy, rapid grower.

**HENRYI**—Fine, large, creamy white flowers; a strong grower and very hardy.

**JACKMANII**—Intense violet purple, with a rich velvety appearance; distinctly veined. The most popular and finest Clematis we have.

**MAD. ED. ANDRE**—A beautiful, new variety; flowers red, large and abundant.

Choice plants of above sorts, each, 60c.

Large plants, each, 75c to \$1.00, postpaid.

**CLEMATIS PANICULATA**—A strong, rapid and vigorous grower; it produces sheets of medium-sized, pure white flowers of the most pleasing fragrance; it is perfectly hardy and well adapted for covering trellises or fences.

Choice plants, each, 35c to 40c; large 50c to 60c.

## Honeysuckle

**BELGIAN**—Flowers yellow, blotched with red above; blooms all summer, fragrant. Each, 50c.

**JAPANESE**—Evergreen; fragrant flowers, white changing to yellow. Each, 35c.

**HALL'S**—Evergreen, very popular; white turning to yellow. Each, 50c.

## Jasmine

**JASMINE NUDIFLORUM**—Branches drooping, enveloped with bright yellow flowers before leaves appear. Each, 50c.

**GARDENIA FLOWERED, CAPE JASMINE**—

Free-blooming, pure white flowers, star shaped; foliage delicate; evergreen. Each, 50c.

## Ampelopsis

**VEITCHII "Boston Ivy"**—Leaves glossy green, coloring bronze in fall; flowers small; berries deep blue. Each, 35c.

**QUINQUEFOLIA "Virginia Creeper"**—Common American Ivy. Each, 35c.

## Trumpet Vine

**BIGNONIA GRANDIFLORA (Trumpet Vine)**—Strong climber; deciduous; flowers orange-scarlet. Each, 50c.

**BIGNONIA TWEEDIANA**—Evergreen, clinging; flowers canary yellow. Each, 50c.

## Dutchman's Pipe

**ARISTOLOCHIA SIPHO**—A handsome bright green luxuriant vine, having large foliage and brownish, pipe-shaped flowers. A strong, rapid grower, valuable for trellis, porch or arbor. Strong Plants. Each, 50c.

**KUDZU VINE**—A very rapid climber with large heavy foliage; bearing purplish flowers in racemes; during late August.

Strong roots, 35c; doz., \$3.00.



## English Ivy

Large, thick, shining, leathery leaves. Each, 25c.

## Wistaria

**W. SINENSIS—Chinese Wistaria**—One of the most elegant and rapid growing of all climbing plants; grows 15 to 20 feet in a season; has long pendulous clusters of pale blue flowers in May and June and in autumn.

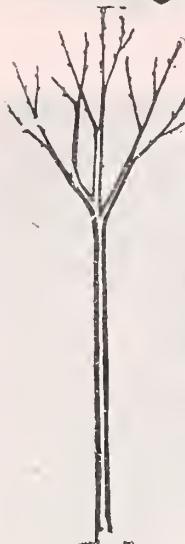
Choice plants, each, 35c to 50c; large, 75c to \$1.50.

**W. MULTIJUGA**—Similar to above, but flowers are darker. Each, 75c to \$1.50.

**W. BRACHYBOTRYS**—White flowering. Each, 75c to \$1.50.

**VINCA—Variegated**—The broad glossy leaves, marginated creamy white, with a free trailing habit, make Vinca one of our most useful plants for porch boxes, vases, etc. Price, 15 and 25c.

**HARDY SPRING FLOWERING shrubs are inexpensive, require little care and will permanently add to the beauty and value of your home. For select list of Ornamental and Flowering Shrubs, Hollies, Evergreen, Fruit and Shade Trees see our 64-page Autumn Catalog. FREE on request.**



## Fruit Trees and Bushes

Our large 66-page Nursery Catalog contains a complete list with full description and illustrations of Fruit, Shade and Ornamental Trees, Shrubs, Climbers, etc. We would be pleased to mail a copy to anyone interested. We give below and on the following page a condensed price list. We can supply all reliable and standard sorts.

### Apples

	Each	Per 10
2 years.....	\$0.25	\$2.00
1 year, 4 to 6 feet.....	.20	1.75

### Apricots

2 years.....	.30	2.75
1 year, 4 to 6 feet.....	.25	2.25

### Cherries

2 years.....	.50	4.00
1 year, 4 to 6 feet.....	.40	3.50

### Pears

	Each	Per 10
2 years.....	\$0.40	\$3.00
1 year, 4 to 6 feet.....	.30	2.50

### Peaches

1 year, 4 to 6 feet, branched.....	.25	2.00
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### Quince

2 years.....	.50	4.00
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### Currants

2 years.....	.15	1.25
1 year.....	.10	.75
Extra large, selected bushes.....	.25	.....

### Grapes

	Each	10	100
2 years.....	\$0.15	\$1.25	\$10.00
1 year.....	.12	1.00	8.00

### Crab Apples

	Each	Per 10
2 year trees.....	.....	\$0.25 \$2.25

### Plums

2 years.....	.....	.25	2.00
1 year, 4 to 6 feet.....	.....	.20	1.75

### Prunes

2 years.....	.....	.20	1.80
1 year, 4 to 6 feet.....	.....	.15	1.35

### Raspberries—Red

	Each	10	100
Best Red Sorts, 2 year.....	\$0.08	\$0.75	\$6.00

### Raspberries—Black Cap

	Each	10	100
Choice well-rooted plants.....	\$0.10	\$0.90	\$6.00
Low prices by the thousand.	.....	.....	.....

### Gooseberries

	Each	10	100
2 years.....	\$0.12	\$1.00	\$8.00
1 year.....	.....	.80	6.00

### Blackberries

	Each	10	100
Standard sorts.....	\$0.08	\$0.60	\$5.00
Oregon Evergreen.....	.15	1.25	10.00

## Specialties in Berries for Market or Garden

**"CONRATH."**—Early Black Cap—Choice, well rooted plants, each, 15c; 10, \$1.25, postpaid. Freight or express, 10, \$1.00; 100, \$8.00.

**BURBANK'S PHENOMENAL.**—Prices: Two-year-old, 25c each; \$2.00 per doz., postpaid; by express or freight, \$1.75 per doz., \$12.50 per 100.

**DEWBERRY, LUCRETIA.**—Price: Each, 15c; per 10, \$1.25, postpaid. By express or freight, 85c per 10; \$7.00 per 100.

**LOGAN BERRY.**—(Raspberry-Blackberry).—Prices: Two-year-old, 20c each, \$2.00 per doz., postpaid; by express or freight, \$1.65 per doz; \$10.00 per 100.

One-year-old (tips), 15c each; per 12, \$1.50, postpaid; by express or freight, \$1.00 per 10; \$8.00 per 100. Low prices by the thousand.

**HIMALAYA GIANT.**—Each, 20c; dozen, \$2.00, postpaid. Freight or express, each, 15c; doz., \$1.50; 100, \$10.00.

**NEW MAMMOTH.**—Prices: Two years old, each, 20c; doz., postpaid, \$2.00; by express or freight, \$1.75 per doz.; 100, \$12.50.

**THE IMPROVED SUPERLATIVE RASPBERRY.**—Price: Each, 15c; doz., \$1.40, postpaid; freight or express, doz., \$1.00; 100, \$9.00.

 For description of these berries and a complete list of Fruits and Berries for the Northwest, see our 64-page Nursery Catalog.

## Sweet Potato Plants

OREGON GROWN

You can grow sweet potatoes in Oregon if you plant the right varieties and set them out after the ground is warm. Rich sandy bottom land is best, but any good garden soil will give good returns.

We have always depended on the South for plants, but this year we offer

Oregon grown plants for seasonable delivery, per doz., 30c; 100, \$1.00, postpaid.

F. O. B. Portland, doz., 25c; 100, 75c; 1000, \$7.00.



Grown Near Salem.



## Vegetable Plants

WE grow large quantities of vegetable plants, and can supply all the kinds listed below, in their proper season, in most any quantity. We have made arrangements this year so that we can supply all vegetable plants in two grades. If you want a quantity of plants write us early.

Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. No plants sent C. O. D.

**Write for prices in large quantities.**

### RHUBARB



NEW 1915

#### RIVERSIDE GIANT

RIVERSIDE GIANT is the famous private stock of Mr. A. R. Cummings, of Canby, Oregon, that has been the leader in the Portland market; and the plants are now offered for sale for the first time, as heretofore, Mr. Cummings has used all the plants that could be propagated for his own setting.

A cross between the California Wine Plant and Victoria Mammoth, this giant variety is unequalled for yield and quality, being crisp, tender, free from stringiness, with a good color and a delicious distinctive flavor. The skin is so thin that it disappears in cooking. Riverside Giant has every good quality of a commercial rhubarb and is so vigorous and productive that over 50 tons per acre is a conservative estimate for the season. Cuttings begin in March and usually four are made—the last one in July. Four men in six hours have cut out 5 tons from less than one-half acre on the fourth cutting.

We have the exclusive sale of this wonderful rhubarb and offer root divisions only—from the original stock—every root will make a thrifty plant if properly cared for.

**Prices:** 25c. each; \$2.50 per doz.; \$20.00 per 100; \$175.00 per 1,000, f. o. b. Portland.



Photo of Plants—First year after setting

Postpaid By express  
Dozen 100 1000

**CABBAGE**—  
Early or late kinds, transplanted..... \$0.20 \$0.75 \$6.00

Not transplanted..... .50 4.00

**Add 25c per 100 for Cabbage Plants by mail.**

Postpaid By express  
Dozen 100 1000

**CAULIFLOWER**—  
Early Snowball, transplanted. \$0.30 \$1.25 \$8.00

Not transplanted..... . . 1.00 7.00

Late kinds, transplanted..... .30 1.00 7.00

Late kinds, not transplanted. . . . .75 6.00

**Add 25c per 100 for Cauliflower Plants by mail.**

Postpaid By express  
Dozen 100 1000

**CELERY**—  
Leading kinds, transplanted. \$0.30 \$1.00 \$7.00

Not transplanted..... .50 5.00

Postpaid By express  
Dozen 100 1000

**TOMATOES**—  
Leading kinds, transplanted. \$0.30 \$1.00 \$7.00

Not transplanted..... . . .75 6.00

**Add 40c per 100 for Tomato Plants by mail.**

**CHIVES** (Schnittlauch), per bunch..... 25c.

#### Hop Vines

**ENGLISH CLUSTER**—The best sort.

Strong roots, postpaid, 5c each; 40c per dozen. By express, 25c per dozen; \$1.50 per 100.

**Write for prices if wanted by the 1000.**

#### Horse Radish

Postpaid, 5c each; 40c per dozen. By express or freight, 25c per dozen; \$1.50 per 100.  
**Write for prices by the 1000.**

#### Asparagus

**ONE-YEAR-OLD PLANTS**—Postpaid, 25c doz., 75c per 50; \$1.00 per 100; By express or freight 20c dozen; 50c per 50; 75c per 100; \$6.00 per 1000.

**TWO-YEAR-OLD PLANTS**—Postpaid, 40c per dozen; \$1.00 per 50; \$1.50 per 100; By express or freight, 25c dozen; 75c per 50; \$1.00 per 100; \$8.00 per 1000.

#### Rhubarb, or Pie Plant

##### VICTORIA MAMMOTH—BEST HARDY VARIETY

**ONE-YEAR-OLD ROOTS**—Postpaid, 8c each; 75c per dozen. By express or freight, 50c per dozen; \$3.00 per 100.

**TWO-YEAR-OLD ROOTS**—Postpaid, 15c each; \$1.50 per dozen. By express or freight, 85c per dozen; \$6.00 per 100.

**If wanted in larger quantities write for special prices.**

#### BURBANK CRIMSON WINTER RHUBARB

A widely advertised, forcing variety of great value, the flavor and quality being superior to any other rhubarb. Comes on very early and lasts through a long season, hardy in some sections, but gives best results when protected. Must be propagated from root divisions, as it does not come true from seed. Large clumps, each, \$1.00; doz. \$10.00 Divided roots, each, 25c; doz., \$2.50. F. O. B. Portland.

**NOTE**—We advise our customers to order all roots by express or freight, if possible, as it enables us to send much larger and better rooted plants, at a less cost to the buyer.

**If wanted in larger quantities, write for special prices.**



# STRAWBERRY PLANTS



**DIAMOND Quality** Strawberry Plants are large, vigorous and healthy. They are heavily rooted and have large, full crowns; have been carefully grown, and are free from disease and pests. We dig as ordered and pack for shipment in ventilated crates of 500 plants each. **They are grown from our select strains and are always true to name; no substitution** is ever allowed without instructions from the purchaser.

Our select strains of **New Oregon, Gold Dollar, Marshall, Magooon, Clark's Seedling** and other Western varieties, many of which were introduced by ourselves, still hold their position as the **leading commercial varieties of the Northwest**, and are being planted more extensively each season. Thus demonstrating, by actual market and growing tests the great superiority of our Western varieties, against the keenest competition from all sections.



Big  
Healthy  
Well  
Grown  
Plants.

Ask for  
Free  
Book,  
"Straw-  
berry  
Culture."

## Care For and Feed Your Plants

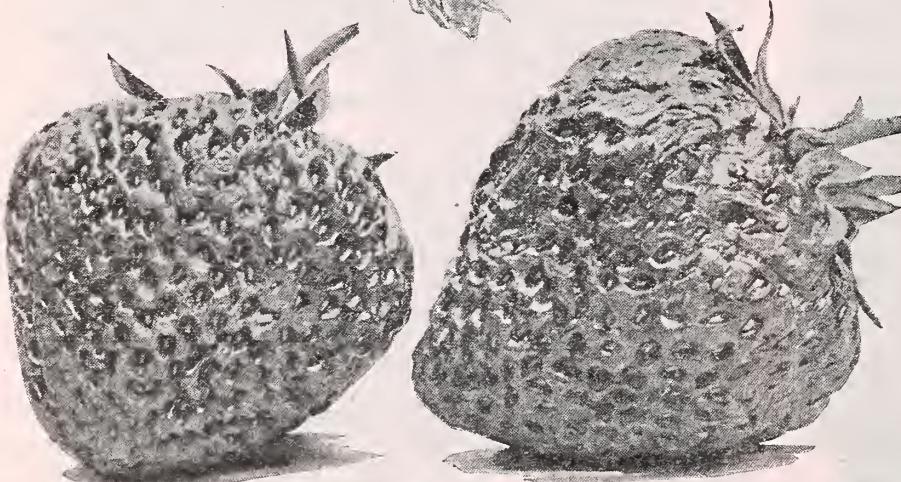
Neglect is the prime factor in strawberry failures, and most strawberry beds suffer from lack of attention and starvation. Proper fertilization and intelligent culture insure enormous crops of finest fruit and freedom from diseases and pests. White grubs, cutworms, crown miners, etc., can all be controlled by preventive measures. Never set strawberries in or near clover sod or hay fields. Such ground should have at least two years cultivation before using for strawberries. Remove the mulch directly after fruiting. This helps to control many evils. For helpful details of care and culture, see our **Strawberry Booklet, 32 pages, sent free on request.**

## NEW OREGON Our Own Introduction

### Best, Most Uniform and Heaviest Yielding Main Crop Strawberry

"**NEW OREGON**" is large, firm and of fine form, averaging 15 to the quart box, color a brilliant, deep, rich red, having a glossy varnished appearance when fully ripe. This dark blood red coloring extends through to the very center, and, no matter how large, "**NEW OREGON**" is never hollow. When fully ripe the distinctive flavor is suggestive of the wild berry, is crisp and delicious, and will remain on the vine for three days without injury, keeping perfectly for many days after picking; stands handling and long shipments and will hold its color, shape and flavor when canned.

"**NEW OREGON**" is an early and continuous bearer, being ready for marketing the first half of May in the Willamette Valley and holds up in size and quality throughout the season, which in some localities extends until frost.



 The strawberries here offered have all stood the market test and you will be safe in selecting any one of them that will suit your conditions and requirements. They are the best varieties obtainable

## STRAWBERRY PLANTS — Continued



NEW FALL BEARING  
Strawberry

### "PROGRESSIVE"

Photo  $\frac{3}{4}$  size of fruit  
4 months from planting.

**PROGRESSIVE** is the best of all late or fall-bearing Strawberries that have come to our attention. The berries are shapely, of a rich red color, firm, and of delicious flavor; good keepers and shippers. Mr. Robson, of Canby, reports "from one-half acre, part set last spring and part in the fall, 42 crates had been picked up to the middle of October and bushels of fine berries lost from want of picking."

Progressive will bear as early as most varieties, but blossoms should be cut back until about four weeks before the berries are wanted, as many as 13 flower stems have been cut from plants set 4 months and in ten days they would be in full bloom again. Progressive is well worthy a trial.

**Prices: Postpaid, Dozen, 40c; 25, 60c; 100, \$1.75; By Express or Freight, 250, \$3.00; 1,000, \$10.00.**

### Gold Dollar—Extra Early

No early strawberry we have ever known equals our special strain of "Gold Dollars."

Gold Dollar berries are large size, dark red all through and have fine flavor. Foliage heavy, large and spreading, which protects the blooms from early frosts. Has a perfect bloom, and strong stems that hold the berries up from the ground, which helps to keep color and flavor during the early rainy season.

Gold Dollar Strawberries are the standard early berry in the big markets of the Northwest and are always in demand. They are sure, heavy croppers, keep up their size throughout the season, and command the highest prices. They are the handsomest, most prolific strawberry.

### Magoon

Originated near Portland; berry large, fine and of excellent sub-acid flavor; bears heavily throughout the season; especially adapted to Western Oregon and Washington.

### Clark's Seedling

The berry that has made Hood River famous; best shipper, berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to dry soil.

### Wilson

An old standard variety; a heavy bearer of fine, moderate sized berries; sharp acid flavor and the leading sort for canning.

### Marshall

One of the best all-round strawberries; very large; dark crimson throughout; fine flavor; a fine market and table berry. Our stock of Marshalls is absolutely true and a vigorous and prolific strain.

### Molinda

A large, firm berry of finest quality and rich coloring; firm and a good keeper. A variety very popular with California market growers, as it bears heavily through many seasons.

By express or freight  
packed in venti-  
lated crates.

	By mail, postpaid	F. O. B. Portland.	
	Dozen	100	1000
Clark's Seedling.....	\$0.30	\$1.00	\$4.50
Gold Dolar.....	.30	1.00	4.50
Magoon.....	.30	1.00	4.50
Marshall.....	.30	1.00	4.50
Molinda.....	.30	1.00	5.00
NEW OREGON — IMPROVED.....	.30	1.00	5.00
Progressive.....	.40	1.75	10.00
Wilson.....	.30	1.00	4.50

Not less than 500 plants of a kind at 1000 rate. Special prices on 3000 or more.

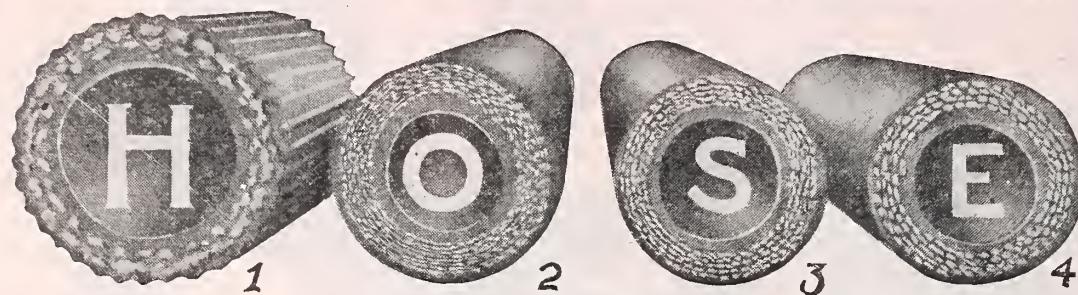
**FREE**

ON REQUEST, OUR 32-PAGE BOOK ON STRAWBERRY CULTURE  
Complete and up-to-date. Things you should know about Strawberries.

**FREE**



## Florists' and Nurserymen's Supplies



- No. 1—Corrugated
- No. 2—Monarch
- No. 3—Pomona
- No. 4—Hood

### For Spray Pumps and Gardens.

THIS season we are offering our customers a very complete and reliable line of spray and garden hose. We buy in very large quantities, direct from the manufacturers, which places us in a position to quote the following very low prices. Most of the brands we offer are manufactured especially for us, and can be obtained nowhere else.

**NOTE.**—All our hose, excepting spray, is furnished in 50-foot lengths, and comes coupled ready for use. We will cut any of these hose in 25-foot lengths at an additional cost of 25c for couplings. We will cut  $\frac{1}{2}$ -inch Pomona and Monarch Spray Hose in any length desired, at an extra cost of 65c for spray couplings in less than 50-foot lengths.

**MONARCH SPRAY HOSE.**—The Monarch, a new spray hose, is even a better grade than our well-known "Pomona." It is absolutely the best hose we can buy; the rubber is of exceptionally good quality and is very heavy; and we do not hesitate to recommend it to orchardmen, who must have a very high-grade and strong spray hose.

**MONARCH SPECIAL SPRAY.**— $\frac{1}{2}$ -inch only  
Per ft., 18c.

**POMONA SPRAY HOSE.**—Our well known Pomona is the best hose which can be bought at a moderate price. It has stood the test of time and hard usage, and has always proved good. 5-ply. Price,  $\frac{1}{2}$ -in., per ft., 13  $\frac{1}{2}$ c;  $\frac{3}{4}$ -in., per ft., 15c.

**SUCTION HOSE.**—This is an excellent grade of suction hose, and is what we furnish with our regular pump outfit. Price; per ft.,  $\frac{3}{4}$ -in., 27  $\frac{1}{2}$ c; 1-in., 30c; 1  $\frac{1}{4}$ -in., 35c.

**AJAX SPRAY HOSE.**— $\frac{3}{8}$ -inch only.

Price, per ft., 10c.

**CORRUGATED GARDEN HOSE.**—A new process, corrugated rubber hose, that will not kink or break. Especially recommended for florists and gardeners who use hose continuously.

Price, per ft.,  $\frac{1}{2}$ -in., 21c;  $\frac{3}{4}$ -in., 25c.

**"HOOD" GARDEN HOSE.**—This is an excellent grade of garden hose. It is made with four heavy plies of canvas, and with good, thick inside tubing. We have no hesitancy in recommending this for ordinary garden use.

Price,  $\frac{1}{2}$ -in., per ft., 10c;  $\frac{3}{4}$ -in., 12  $\frac{1}{2}$ c.

**ST. HELENS GARDEN HOSE.**—This is a good grade of garden hose of moderate price, and where a hose of medium price is wanted it will give excellent satisfaction.

Price,  $\frac{1}{2}$ -in., per ft., 9c;  $\frac{3}{4}$ -in., 11c.

### Spray Calendar—When to Spray, What to use

Insect or Disease.	Plant Attacked.	What to Spray With.	First Spraying.
Codling Moth .....	Apple, Pear .....	Arsenate of Lead .....	Just before calyx cups close.
San Jose Scale .....	.....	Scalecide, Standard Sulphur Lime Solution .....	When leaves are off the tree.
Oyster Shell Bark Louse ..	Apple, mainly .....	Standard Sulphur-Lime Solution .....	When leaves are off the tree.
Peach Moth or Twig Borer.	Peach .....	Scalecide, 1 part to 20 parts water .....	When the insects appear.
Woolly Aphis .....	Apple .....	Scalecide, 1 part to 40 parts water .....	When the insects appear.
Aphis .....	Roses and plants .....	Aphiscide, Fir Tree Oil Soap .....	Just as soon as the insects appear.
Cabbage Worm .....	Cabbage .....	Bug Death (non-poisonous) .....	Before the worms eat into the cabbage.
Cabbage Aphis .....	Cabbage .....	Scalecide, 1 part to 40 parts water .....	When the insects appear.
Slug .....	Pear, Cherry, Peas ..	Slug Shot, or Bug Death .....	When the insects appear.
Thrips .....	Roses .....	Thrip Juice, or Aphiscide .....	When the insects appear.
Cottony Scale .....	Pear, Currant .....	Scalecide, 1 part to 40 parts water .....	When insects become cottony (May).
Scab .....	Apple, Pear .....	Bordeaux .....	Just before blossoms open.
Blackspot Canker .....	Apple .....	Bordeaux, double strength .....	Immediately after leaves fall.
Leaf Curl .....	Peach .....	Standard Sulphur-Lime Solution .....	Before buds burst.
Mildew .....	Gooseberry .....	Potassium Sulphide, 1 ounce to 2 gallons water .....	Just as buds burst.

### Gould Spray Pumps

WILL GIVE AND MAINTAIN THE NECESSARY PRESSURE TO SPRAY RIGHT. They are built for lasting service. See Page 113



SPRAYING to be effective MUST BE WELL DONE—

"How to Spray — When to Spray — What Sprayer to Use" is a valuable and interesting book that tells all about sprays and sprayers. We will mail this book to you free on request.

# GOULDS SPRAY PUMPS

We are General Agents for the Gould Sprayers, guaranteed to be the best built, most lasting and of the highest efficiency. They are the recognized standard.

Every grower of fruit, berries, or flowers should have a good spray pump of some kind, one suited to the work that is to be done. If you want to get the best results, you must spray and spray often. Remember, a person derives the same satisfaction from using a good spray pump that he does from using a good article of any other kind; so when you buy, get one of the following up-to-date and reliable outfits.

THE PRINCIPALS  
of  
FRUIT GROWING  
BAILEY  
516 pages, \$1.65  
POSTPAID



ADMIRAL (Fig. 1608).

## Gould's "ADMIRAL" Double Acting Sprayer

For Large Orchards, Parks, Groves, Etc.,—Very Powerful.

The "Admiral" is double acting and produces a steady stream at the nozzle, is built for continuous hard work and high pressure. Especially designed for large orchards, and will meet every requirement. The brass cylinder lining is of heavy seamless tubing, with a cast bronze cylinder head, and can be easily removed, as shown in the engraving. This is an important feature, as the gritty nature of many of the spray mixtures has a tendency to cut the cylinder lining, and when it is badly worn it can be replaced at small cost. The valves are all brass, and each one in a separate valve box. They are easily reached by removing the bronze valve box covers. The brass piston rod is outside guided, making a perfectly straight thrust through the stuffing box, which is outside packed.

The removable malleable iron lever is long and powerful, and with the large air chamber a high pressure can be easily maintained. Suction can be taken from either side of the pump, and there are two discharge openings fitted for  $\frac{1}{2}$ -inch hose. When ordered without hose or nozzle, both discharges have half couplings for  $\frac{1}{2}$ -inch hose and a brass strainer.

This Sprayer is of sufficient capacity to supply, if necessary, four leads of hose, or two leads, each with two, three or four nozzles, and will be found fully as serviceable as a power sprayer for orchards not large enough to warrant the purchase of a power outfit.

This same pump fitted with a pitman in place of lever for connection to gasoline engine.

**Outfit A.**—Pump only, with strainer and suction hose coupling \$30.00

**Outfit B.**—Pump with 8 feet suction hose and strainer.... 32.75

**Outfit C.**—Pump with 8 feet suction hose, two 25-foot leads best  $\frac{1}{2}$ -inch hose, two 8-foot bamboo extensions, with Globe valves and nozzles..... 40.00

**ADMIRAL PUMP with 3-inch cylinder** furnished on any of above outfits for \$3.00 extra. **For pressure gauge, add \$2.00.**

**PITMAN** to connect Admiral for power ..... **Extra, \$1.25.**

## POWER OUTFITS

We assemble outfits in any manner desired by customer, and suggest the right attachments for special purposes. Attaching any standard engine specified. Write us your requirements. We can save you money and guarantee a satisfactory equipment.

### SCALECIDE

Spreads and Penetrates  
Safe, Efficient, Economical  
Will not Injure Your Face  
or Equipment

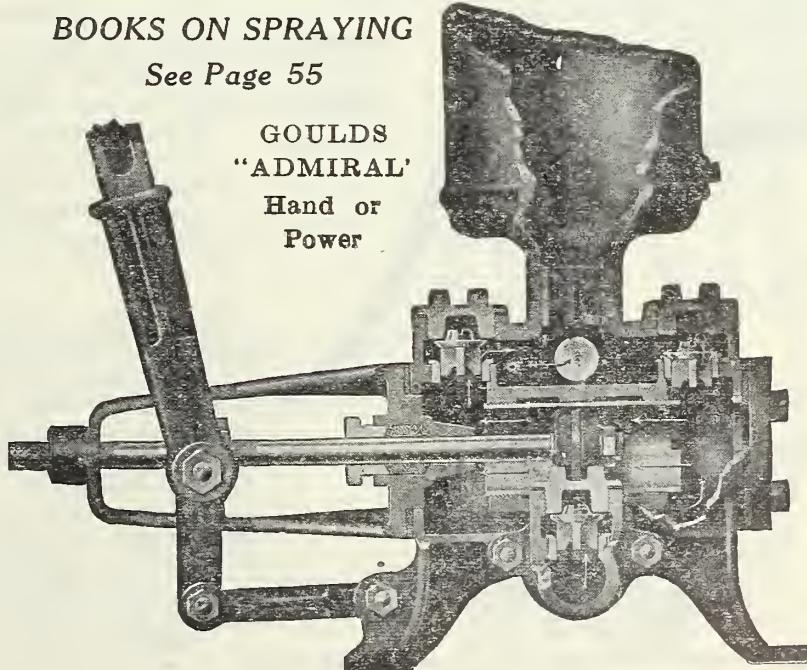
 Apples from trees sprayed with "SCALECIDE" took all the first prizes at the Pennsylvania Horticultural Society Meeting; all the first prizes both this year and last at the New Jersey Horticultural Society Meeting; a long list of sweepstakes and first prizes at the New England Fruit Show in Boston; also first prize at the Ohio State Fair, Connecticut State Fair at Hartford, and Pomological Society Meeting at Berlin, Conn. and a Gold Medal was awarded Scalecide at the National Horticultural Congress, Council Bluffs, Iowa.

**FREE SAMPLE and Interesting Information on Request**

### BOOKS ON SPRAYING

See Page 55

GOULDS  
"ADMIRAL"  
Hand or  
Power





## SPRAY PUMPS AND SPRAYERS—Continued

### Monarch Two-Cylinder Spray Pump

**Fig. 1506.—Monarch**—This pump has many advantages, and we believe it is the best of the large pumps. The main advantages are: First, the long lever, which can be shifted to pull or push, or to lift or drop, and can be changed by the operator any time he desires a relief; second, pump stands outside of the barrel, and all parts can be easily looked after; third, cylinders are perpendicular, and any grit will not lie against the plunger, to wear it or the packing out, as in the case with the horizontal cylinders; fourth, there are no valves in the plungers; the packing is on the outside, and can be tightened any time, without taking anything to pieces; fifth, the four brass valves (each one by itself and under a separate cap), can be reached by merely unscrewing the cap, and without disturbing the rest of the pump.

**Outfit A, pump only, including strainer and hose connection, \$24.25**  
**Outfit B, coupled with 6 feet  $\frac{1}{4}$ -inch suction hose..... 26.00**  
**Outfit C, pump, suction hose, 25 feet best  $\frac{1}{2}$ -inch spray hose,  
8-foot bamboo extension, Globe valve and nozzle..... 33.00**  
**For pressure gauge, add \$2.00.**

#### Take Care of Your Sprayer

Always empty remaining solution, and pump through some clean water after using. Clean thoroughly before putting away at end of season.

Never leave sprayers containing liquid where they will freeze; if the cylinders are iron they are apt to crack and if brass they will expand.

#### Spreads and Penetrates

An inexperienced or careless man can do a thorough job with Scalecide where he would fail to get a good distribution with Lime and Sulphur. **Page 120.**

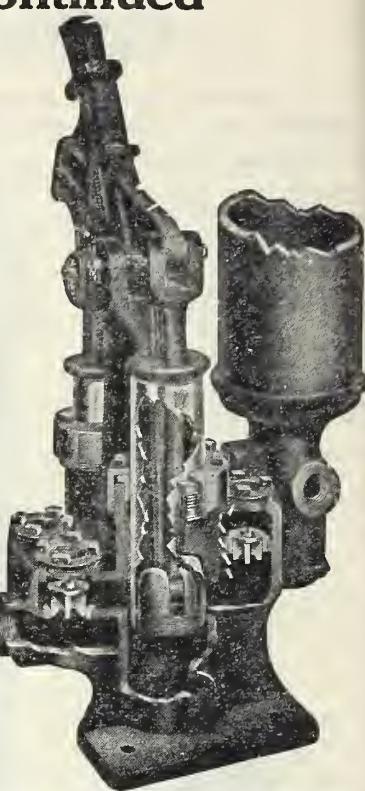


Fig. 1506. MONARCH

**We recommend** the use of a pressure gauge on all large pumps, as it accurately tells the force of spray when delivered.

### Gould's Pomona—Our Leading Barrel Pump

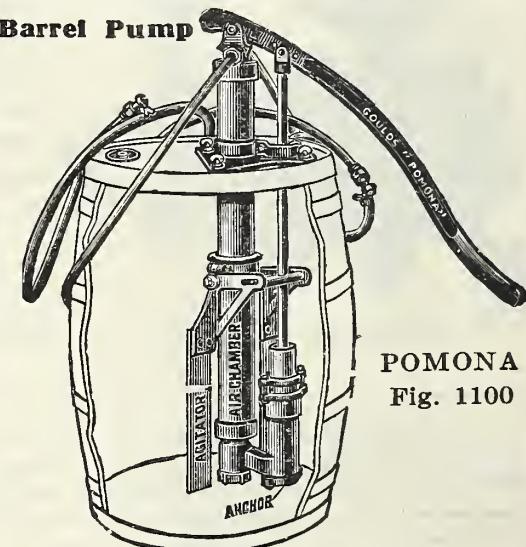
**Fig. 1100.—"Pomona"** Spray Pump has won for itself an enviable reputation. We unhesitatingly offer it as the best orchard spray pump for mounting in a barrel. It has great power and capacity. Briefly stated, other points of superiority are: No leather packings, consequently no hardened and useless valves. All workings parts bronze, including plunger, gland, valves, valve seats, etc. Plunger is outside packed. Valves are easily accessible. Air chamber is very large and of steel, free from imperfections of cast iron. Lever long and powerful, with adjustable stroke, three, four or five inches. The agitator, as shown in the cut, is operated by the stroke of the handle, so whenever any liquid is pumped it is thoroughly agitated. Pump is held securely by small anchor located at bottom of barrel, and by adjustable clamp plate at the top. New plate admits insertion or withdrawal from barrel without removing the agitator.

**Outfit A.—Pump only..... \$15.00**

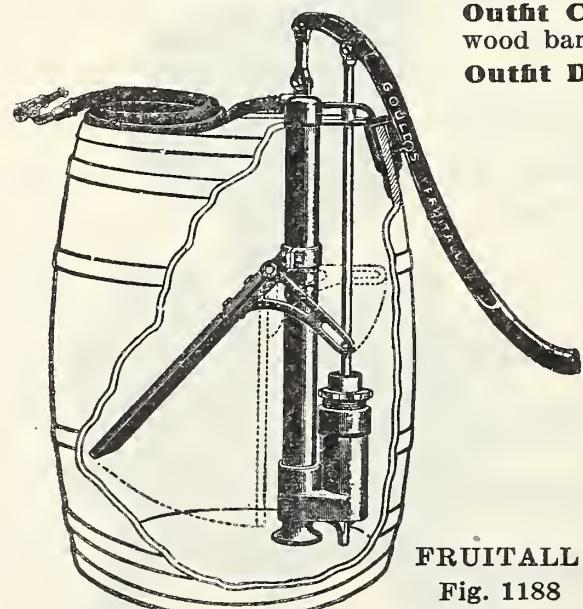
**Outfit B.—Pump with 12  $\frac{1}{2}$  feet  $\frac{1}{2}$ -inch best 5-ply spray hose, one Vermorel nozzle, one 8-foot bamboo extension, with cut-off, all complete..... 19.25**

**Outfit C.—Same as Outfit B, except we furnish a good hard wood barrel and mount the outfit..... 21.75**

**Outfit D.—This is our regular Pomona outfit, the best barrel pump outfit that can be bought. It consists of one No. 1100 pump with two 12  $\frac{1}{2}$ -foot leads of best 5-ply spray hose, two Vermorel or Seneca nozzles, two 8-foot bamboo extensions, with cut-off; all in working order and mounted in barrel..... 25.00**



POMONA  
Fig. 1100



FRUITALL  
Fig. 1188

### Fruitall

**Fig. 1188.—"Fruitall"** Spray Pump is made on the same general lines as our famous "Pomona." It is, however, made lighter and of smaller capacity. All working parts, including plunger, gland, valves, valve seats and strainer are made of brass. Pump is held in barrel by anchor at bottom and adjustable clamp at top, fitting over end of stave. Not made for side of barrel.

**Outfit A. Pump only ..... \$11.00**

**Outfit B. Pump with 15 feet of 4-ply spray hose and one Vermorel nozzle, all complete..... 14.00**

**Outfit C.—Pump mounted in barrel. 15 feet 4-ply hose, 8-ft. bamboo, nozzle and cut off, all complete.... 17.75**

**NOTE.—Extra 5-ply hose at 13  $\frac{1}{2}$  cents per foot.**

**Planet Jr. Special Orchard Cultivators Are Strong, Light, Easy Running, Durable, Adapted to Every Need—Page 79.**

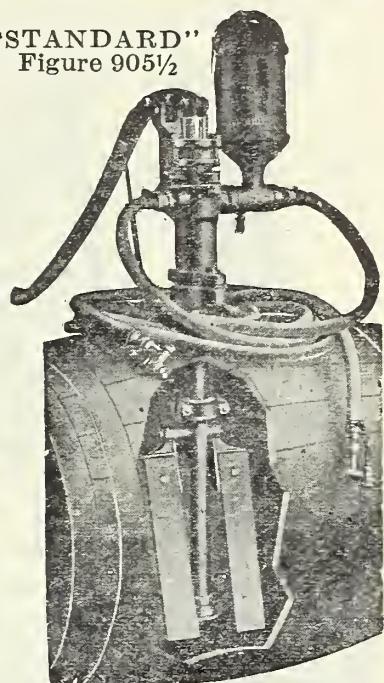
## SPRAY PUMPS AND SPRAYERS—Continued

## Gould's Standard Sprayer

Powerful, Large Capacity, Durable.

The "Standard" Sprayer is made with a 2 1/2-inch cylinder. The cylinder is brass-lined, the plunger brass-encased and the valves are brass, making all working parts proof against the spraying mixtures. The plunger is easily repacked without taking the sprayer to pieces, and is unusually large, known as a "differential" plunger, which produces a continuous stream of liquid from the nozzle, similar to the action of a double-action pump. The large standard provides an ample air chamber. The base is made so as to fit either the end or side of a barrel.

<b>Outfit A.</b> — Pump and strainer only.....	<b>\$ 7.50</b>
<b>Outfit B.</b> — Pump with agitator and suction pipe.....	<b>9.00</b>
<b>Outfit C.</b> — Same as B, with 1 15-foot lead of hose and nozzle.....	<b>12.00</b>
<b>Outfit D.</b> — Same as C, with 2 15-foot leads of hose and nozzles.....	<b>15.75</b>
<b>Outfit E.</b> — Same as D, with 2 bamboo extensions and globe valves.	<b>18.50</b>

We supply a barrel and mount sprayer for **\$2.50** extra.
 "STANDARD"  
Figure 905 1/2


## Field Crop or Potato Sprayer

A practical 4 row adjustable attachment including nozzles, for use with any barrel or power pump. A first-class outfit built for service.

Price complete, **\$15.00**.
 Just right  
for  
City and  
Suburbs


## "Ideal" Spraying Outfit

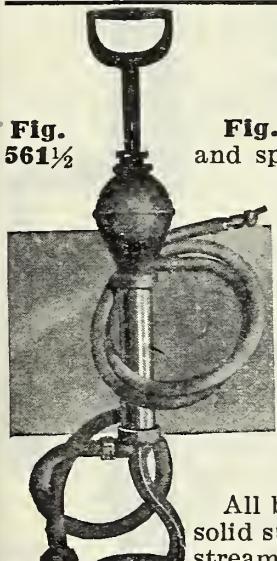
The "Ideal" has been designed for small growers, city and suburban homes, and for all purposes where nothing as large as a barrel or power outfit is needed, and is the right outfit for the poultryman who does much regular spraying or whitewashing.

## Is Light, Compact, Easy to Operate.

Tank holds 15 gallons; will not slop or spill. Pump has large air chamber. Bronze ball valves; valves are removable, cannot clog. Well made; gives a pressure of 150 lbs; has mechanical agitator and strainer for suction. Outfit complete, 10 ft., 3-8 inch hose, 10-ft. extension in three pieces, one T-handle shut-off, one "Ideal" nozzle; shipping weight, crated, 60 pounds. Price..... **\$20.00**

## Hand Pumps and Sprayers

## Premier Bucket Pump

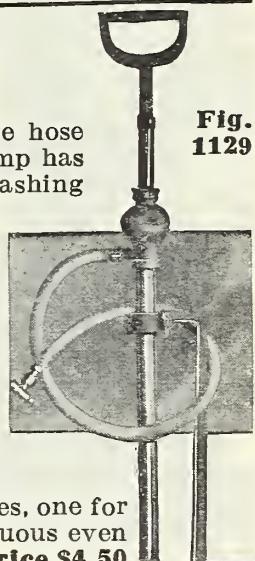
Fig.  
561 1/2

**Fig. 561 1/2.**—Brass bucket pump, arranged with suction and discharge hose and spray nozzle, which will throw a solid stream or fine spray. Pump has brass cylinder, plunger and rod, and is particularly adapted for washing windows and wagons, spraying flowers in conservatories, gardens, etc., etc.

Price, complete, **\$5.75**.

## Bordeaux Bucket Pump

**Fig. 1129.**—Brass garden and spray pump; is especially designed for spraying in gardens and greenhouses. The pump is double action in effect; Seneca nozzle, ball valves; proof against the action of acids and oils. Footpiece is malleable iron. Pump is set in pail or bucket, with foot outside. Weight 6 1/2 lbs.

Price, complete, **\$4.50**.Fig.  
1129

## Diamond Spray and Force Pump No. 32

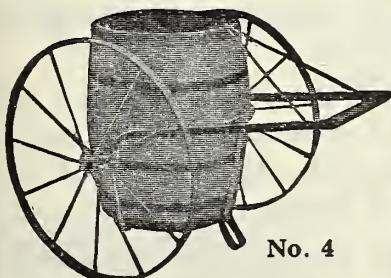
All brass except handle and stirrup. Ball valve, air chamber, 3 nozzles, one for solid stream for fire fighting. 3 feet of good hose. Will throw a continuous even stream or spray, a very powerful bucket pump. Wt., packed, 6 1/2 lbs. Price **\$4.50**

## Portland Seed Company's Handy Carts

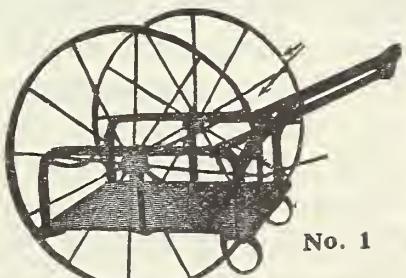
 All Metal Parts Malleable Steel,  
Strong, Light, and Easy Running.

## No. 4 Barrel Cart

Will pick up any kind or size of barrel from a lime to large spray barrel, holding it firmly; no attachment necessary on the barrel. Contents can be emptied by simply raising the handles. Has 36-inch Wheels, 2 1/2-inch elliptical rims, 1/8 inch steel axle; weighs, K. D., 70 pounds.

Price, **\$8.00**.

No. 4



No. 1

**NO. 1 PLATFORM.** Best cart for general use. Will carry four large milk cans, sacks of potatoes, wood, barrels, in fact, anything heavy can be easily and quickly handled. Platform 27x30 inches; 36-inch wheel 2 1/2 inch elliptical tire. Neatly finished and painted. Weight, K. D., 85 pounds Price, **\$8.75**

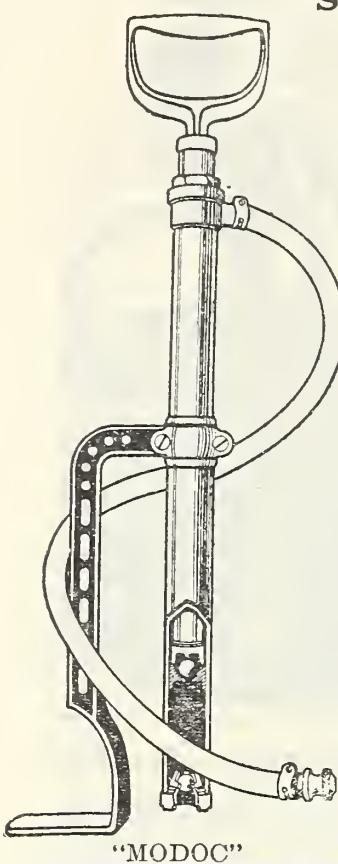


## SPRAY PUMPS AND SPRAYERS—Continued

## MODOC

The Modoc is a splendid value in a Bucket pump being strongly built of the best material. Has large air chamber making possible a very heavy pressure.

Price, each, \$3.00.



"MODOC"

**"HOW to Spray, WHEN to Spray, and WHAT SPRAYERS to Use."**

Tells all about sprays and sprayers, and how to make the best "white wash."

Ask for a Copy.

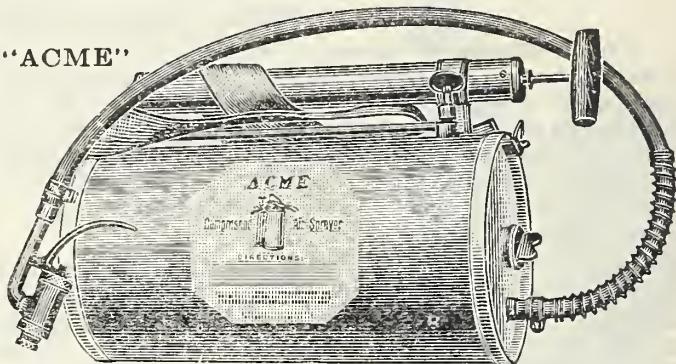
## Brandt "PERFECTION"

A first class pressure sprayer with automatic cut-off and nozzles for fine and coarse work. Capacity 4 gals., shipping wt. 14 lbs.

Price,  
Galv. Steel Tank, \$5.50.  
Brass Tank, \$7.50.

## Acme Compressed Air Sprayer

"ACME"



Made of strong galvanized steel with locked seams tested to 60 lbs. air pressure. Brass pump-seat, bronze ball check-valve easily removable, seamless brass cylinder 1 1/2 diameter, solid brass non-corrosive, self cleaning nozzle with spiral point, producing whirling spray, an exclusive patented feature producing a finer and better spray than any other pressure sprayer.

Capacity 3 gals., adjustable carrying strap. 3 foot extension.

Price, each, \$5.50

## Diamond Poultry Dip

Keeps your poultry healthy and yards in a sanitary condition. See page 138.

## Portland Seed Co.'s Bucket Pump

This little pump is very convenient for all sorts of small work. Has brass cylinder and valves, two nozzles, for fine or coarse work. The best low-priced pump on the market.

Weight, 6 lbs. Price, \$2.75.

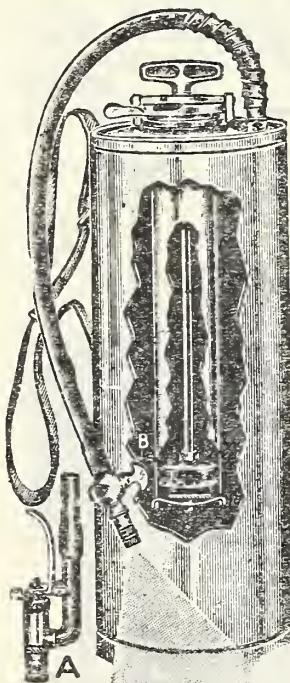
## Brown Auto-Spray No. 1

The "Auto-Spray" No. 1 works automatically for six to fifteen minutes. Two pumpings will usually discharge the entire contents. Simply fill two-thirds full of solution and pump up air pressure.

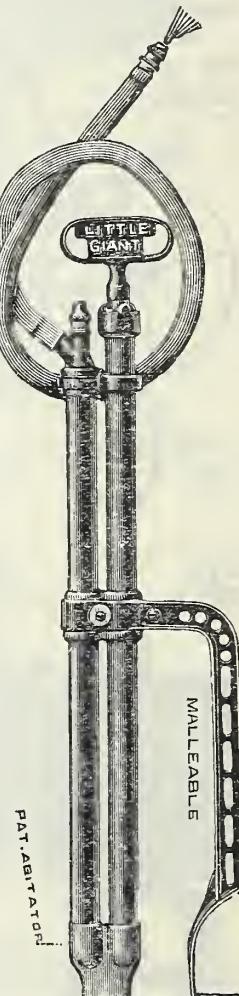
No other style of sprayer will do such a variety of work and do it so well. We recommend it for shrubs and vines, greenhouses, poultry houses, hospitals and stables for disinfectants, for sheep and cattle dip and fly oils.

Diameter, 7 inches. Height, 2 feet. Capacity, 4 gallons. Weight, empty, 8 lbs. Weight, loaded, 39 lbs. Weight, shipping, 13 lbs. Price, Galvanized, with stop cock, \$5.50; brass, \$7.50.

With the Auto-Pop Nozel, see cut A, \$1.00 extra.



AUTO-SPRAY No. 1



P. S. CO.'S  
BUCKET PUMP

 Stable Manure that is allowed to decompose by exposure to weather loses a large part of the NITROGEN its most valuable element.

You can save this loss by scattering a little KAINIT over the surface of the manure each day, about a pound per head of stock. This prevents the nitrogen from escaping, retaining its original value, and by adding phosphoric acid to manure thus treated you have a complete fertilizer of highest value.

For Price of Kainit, Potash and Phosphoric Acid—See pages 52 and 53.

OUR FERTILIZER BOOKLET tells about Fertilizer—gives analysis and instructions for use. An interesting and valuable book you should have.—FREE ON REQUEST.



# Spray Pumps and Sprayers

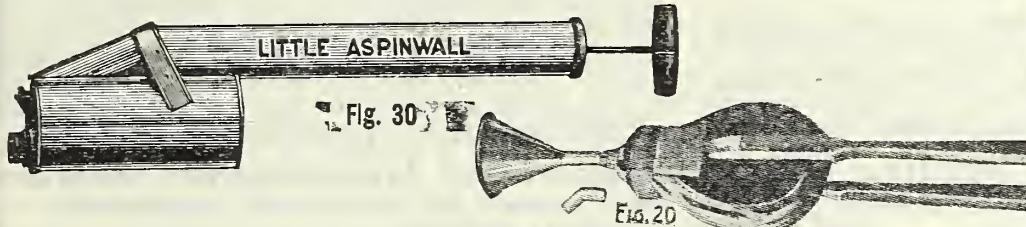
## Lever Handle Bucket Pump No. 324

The lever handle and large air chamber make this the most powerful bucket pump and the easiest one to operate. All working parts are solid brass with brass ball valves and patent agitator. Fitted with graduating Vermorel nozzle to throw a fine or coarse spray or a solid stream. Weight, 8 lbs. Price, \$3.90.

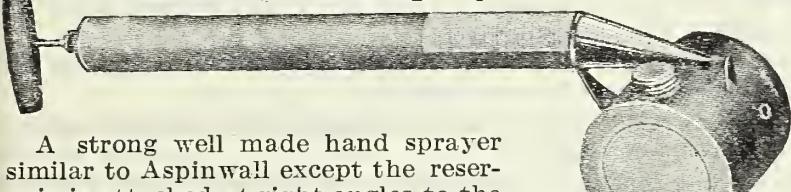
## Hand Sprayers and Sprinklers

### Aspinwall Sprayer

**Fig. 30.** One of the most convenient and economical hand sprayers for applying liquid lice-killers, sprays, etc. Nothing cheap but the price. Weight, 1  $\frac{1}{4}$  lbs. Price, 50c.



### Faultless Hand Sprayer



A strong well made hand sprayer similar to Aspinwall except the reservoir is attached at right angles to the Pump. Wt. Pkd. 1  $\frac{1}{2}$  lbs. Price, 50c.

### Insect Powder Gun

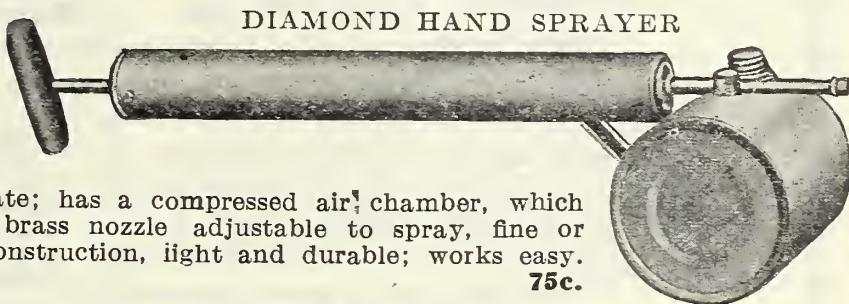
There is no need to waste any powder if you use this small hand powder blower. Detachable bottom for filling. For use in applying insect powder of any kind on poultry, dogs or cats.

Price, each, small, 15c; large, 30c, postpaid.

DIAMOND HAND SPRAYER

### Portland Seed Co.'s

### Diamond Hand Sprayer



This is the best hand sprayer to date; has a compressed air chamber, which makes the pressure continuous; has brass nozzle adjustable to spray, fine or coarse; brass ball valve; is simple in construction, light and durable; works easy. Wt. 1  $\frac{1}{2}$  lbs.

75c.

### Plant Sprinklers

These little sprinklers are used by all florists for spraying pot plants with water or insecticide. They are made of the best quality of rubber, and are durable and lasting. Made in two styles. straight and angle neck. Will spray in any position, and can be quickly filled. (See cut.)

No. 1. 5-oz., Straight neck, weight 4 oz	Each, \$0.60
No. 3. 10-oz., Straight neck, weight 8 oz	Each, 1.00
No. 1. 5-oz., Angle neck, weight 4 oz	Each, 0.65
No. 3. 10-oz., Angle neck, weight 8 oz	Each, 1.10



### Pacific Lawn Sprinklers

Properly constructed, iron stand, upper part all brass. Turns with small force. Weight, 3  $\frac{1}{2}$  lbs.

Each, \$1.25.

### BUSY.

A regular water flirter, runs easy. Weight, 2 lbs. Price, \$1.00.



PACIFIC

BUSY

### C. B. G. See Cut page 120

**Cheap, but good.** Best cheap sprinkler. Weight 2 lbs.

Price, 35c. SPRINKLER

### Kinney Siphon Pump

No florist or gardener can afford to be without this practical device. It is invaluable for applying liquid manure spraying, tempering water or drawing water out of furnace pits; made of solid brass; will last a lifetime. Weight, 1  $\frac{1}{4}$  lbs.

Price, each, \$2.50.

### NICOTICIDE--

is a most efficient remedy for Aphis, Thrip, Mealy Bug, Red Spider, etc. Used as a spray or for fumigating; is equally satisfactory. **Florists** everywhere depend on **Nicoticide**. For prices see page 119.

**NICOTICIDE LAMPS**—For fumigating. Each 50c.



Contains No  
Free Al-  
kali, No  
Caustic  
Soda



## SPRAYS, INSECTICIDES POWDERS and WASHES

THE great improvement in Sulphur and Arsenate of Lead Sprays and methods of manufacture have not only reduced their cost and the risk and expense of preparing and using them but have also increased their efficiency, and it is now possible to secure a dependable and uniform product of a known strength that is easy to use and that will give profitable and satisfactory results.

### SPRA-SULPHUR—Dry

**SPRA-SULPHUR** is a granular compound that quickly dissolves in cold or hot water—stays in solution—will not clog or cut nozzles and is a superior and efficient form of sulphur for destroying SAN JOSE and other SCALE INSECTS and all FUNGUS diseases that can be controlled in the dormant season, and as a SUMMER SPRAY for APPLE SCAB, APHIS LARVAE, MILDEW and other Fungus troubles. The lime in Lime-Sulphur causes the solution to quickly form a crust, on striking the tree or scale which arrests its action, **Spra-Sulphur** contains no lime, does not crust, but spreads and penetrates.

**100 pounds equals a 600 pound barrel of Lime-Sulphur Solution**  
Costs less and does better work, no leaky barrels, no waste, keeps indefinitely and you pay no freight on water.

**SPRA-SULPHUR** is packed in airtight, friction-top tins and should be kept tightly covered until ready to use, as it is so readily soluble that if exposed to the air it will attract sufficient moisture to dissolve it. But if kept sealed will keep indefinitely.

**FOR WINTER SPRAYING** when trees are dormant, use 10 pounds of SPRA-SULPHUR to 50 gallons of water. For control of Scale and fungus diseases.

**FOR SUMMER SPRAYING**, when trees are in leaf, to control **Apple Scab, Aphid Larvae, Mildew**, etc., use 1½ pounds to 50 gallons of water.

When Arsenate of Lead is added for codling moth and all climbing insects make your sulphur solution first, then add Arsenate of Lead, "CORONA DRY POWDERED" ¼ of a pound to 50 gallons of solution. If paste form is used, 1½ pounds to 50 gallons is needed.

<b>Prices:</b>	<b>1 pound 20 cents</b>	<b>10 pounds \$1.25</b>	<b>50 pounds \$4.00</b>
	<b>5 pounds 75 cents</b>	<b>25 pounds 2.50</b>	<b>100 pounds 7.50</b>

*Spra-Sulphur is not as harmful to your skin nor as corrosive as lime-sulphur.*

*"More convenient, more uniform, equally effective"*

Sutherlin, Oregon, July 6, 1914

Gentlemen:

We have sold your SPRA-SULPHUR to nearly all the growers in this valley and so far have not had a single complaint. It has taken the place of the liquid Lime-Sulphur entirely, it is so much easier to handle and more uniform in strength.

Sutherlin Fruit Growers Association  
(Signed) F. W. Frantz, Manager

Roseburg, Oregon, October 7, 1914

Gentlemen:

Our growers have used the SPRA-SULPHUR from your company this season and report excellent success therewith. We find it much more convenient to handle than the lime and sulphur solution and equally effective for all purposes where a sulphur spray is used.

Umpqua Valley Fruit Union  
(Signed) A. L. Kitchin, Manager

Spra-Sulphur is manufactured in Oregon under the original patents (granted to Chas. E. Hite, filed in 1910 and recently reissued) covering the exclusive right to the use of all fixed alkalies such as soda ash (sodium carbonate) and all similar compounds, with sulphur in the manufacturing of spray materials.

## "CORONA" Arsenate of Lead

DRY POWDERED

*Contains only ARSENIC and LEAD OXIDES. NO FILLERS*

**Mixes Quickly and Easily. Stays Mixed Longer and Sticks better to branches, leaves and fruit than Any Other Arsenate.**

**NO SEDIMENT — NO LUMPS — NO WASTE — NEVER CLOGS NOZZLES**

"CORONA" Dry Powdered Arsenate is a Light, Fluffy Powder that cannot freeze, dry out, cake or lose its strength—is always uniform and requires only 1½ pound to 50 gallons of water. Efficient, Economical and Convenient. *Highest Percentage of Killing Power.*

 Ask for Full Information, Testimonials and Sworn Tests.

**PRICES:** 1-2 lb. 25c; 1 lb. 40c; 5 lbs. \$1.75; 10 lbs. \$3.00; 25 lbs. \$6.25; 50 lbs. \$12.00;  
100 lbs. \$23.00; 200 lbs. \$44.00



## Sprays, Spray Material and Washes—cont.

**Liquid sprays cannot be mailed. Solid sprays, extra for postage.**

### Scalecide

*The best miscible oil spray for San Jose scale and soft-bodied, sucking insects. Also contains a powerful fungicide, which will control fungus diseases that are controllable in the dormant season.*

This assertion is not based on a single test on ten or a dozen trees, but on actual work in great commercial orchards, where thousands of gallons of spray were used. "Scalecide" is a petroleum oil that mixes readily with cold water in any proportion, and stays mixed. It is not necessary to use an extra tank or barrel, and no hot water should be used. Prepared by adding one gallon of "Scalecide" for every fifteen or twenty gallons of water, right into your spray tank. No crude oil is used in the manufacture of "Scalecide" all the light and heavy oils that might prove injurious being removed — **but all of the soluble sulphur is retained**; this has the insecticidal value. That "Scalecide" is a **satisfactory and dependable remedy for San Jose Scale is attested by the thousands who have used it.**

Price per qt., 35c; gal., \$1.00; 5 gals., \$4.00; 10 gals., \$7.75; 50-gal. bbl., \$34.00.

Send for free sample and printed matter concerning "Scalecide."

### Diamond Lime and Sulphur Solution

#### For San Jose Scale.

**You can not afford to risk a cheap open kettle product. Be safe. Use the best.**

Diamond Lime and Sulphur Solution is prepared in pressure tanks by steam, and is always uniform and of the highest efficiency.

The "Lime and Sulphur" Solution for San Jose scale is endorsed by experimental stations and state horticultural societies of all the fruit-growing states as the standard preparation for exterminating San Jose scale on all deciduous trees.

Our Lime and Sulphur Solution tests 30 Baume Scale, is made of the purest and best quality of Sublimed Sulphur and of Lime, is a clear, deep cherry colored liquid free from sediment and is already to mix just as you get it. Merely add 11 gallons of water with each gallon of the Lime and Sulphur Solution. There is no sediment to clog the sprayers. No boiling to be done, which saves fuel, time, labor and annoyance. It is always alike and uniform in strength and results.

Price, 1 qt., 20c; 1 gal., 50c; 5 gals., \$1.50; 10 gals., \$3.00; 50-gal. bbl., \$8.25.

### Portland Seed Company's APHISCIDE

#### Our Best Summer Spray for Roses

A clean efficient spray for aphid, thrip, and kindred insects on plants of any kind. Specially fine for house plants, as it has no offensive odor and will not injure or stain the plants.

Price, qt., 25c; wt. 3 lbs.; gal. 60c.

#### Knoxweed

A single application of Knoxweed kills Plantain, Thistle or any Noxious Weed—Top and Root. Sold under a positive guarantee.

Price, Dropper Can, 50c; Half Gallon, \$1.50; Gallon, \$2.50.

#### Tree Tanglefoot

For caterpillars, moths and worms. Protects against all climbing insects. One pound makes a band 9 feet long.

Price, 1 lb., 30c; 3 lbs., 85c; 10 lbs., \$2.65; 20 lbs., \$4.80.

**BLUE LABEL SLUG DESTROYER.**—This is the first powder of its kind that we have found that will positively kill slugs and keep them away from young plants. Full directions on each package. Wt. 2 lbs. Put up in 25c packages.

**BLACK LEAF "40"**—Latest and best tobacco spray. 1 lb. makes 170 gals.

1/2 lb. can 85c; 2 lbs. \$3.00; 10 lbs. \$12.50.

**BORDEAUX MIXTURE.**—(Lion Brand). For fungi—in liquid form. Dilute with 49 parts of water. 1 qt., 50c; wt. 4 lbs.; 1 gal., \$1.40.

**BLUESTONE.**—(Vlrlol).

1 lb., 10c; per 100 lbs., market price.

**BUG DEATH.**—A non-poisonous insect-killing powder that is in high favor among gardeners for cabbage, tomato and cucumber bugs, etc. Use 12 lbs. per acre.

Per lb: 15c; 5 lbs: 65c; 100 lbs. \$11.00

**BUHACH**—Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.00

**HAMMOND'S SLUG SHOT.** For destroying slugs, cabbage and turnip flea, currant worms, etc. Per lb., 15c; 5-lb., pkg., 50c.

**HAMMOND'S GRAPE DUST.**—To prevent mildew on roses, grapes, and gooseberries.

Per lb., 15c; 5 lb. pkg., 50c.

**HELLEBORE.**—1/4 lb., 15c; 1/2 lb., 20c; 1 lb., 35c.

**KEROSENE EMULSION.**—An excellent spray for wooly aphid and clover mite.

Qt., 50c, wt. 3 lbs.; 4 qts., \$1.25.

**NICOTICIDE.**—The best fumigant and spray for greenhouse work. Kills aphid, red spider, mealy bug, thrip, etc.

Paint can, \$2.50; qt., \$4.50; gal., \$15.00.

**POTASSIUM SULPHIDE**—(Liver of Sulphur).

One of the best preventatives of mildew on roses and berry bushes. Dissolve 1/2 oz. in one gallon of hot water. When cold apply as a spray.

Price, 1 oz., 10c; 1-lb. can, 50c.

**PARIS GREEN**—(Lion Brand) The standard of purity. Guaranteed superior to other makes.

Price, 1/4 lb., 15c; 1/2 lb., 20c; 1 lb., 35c; 2 lb., 65c.

**QUASSIA CHIPS.**—Generally used with Whale Oil Soap for plant lice, etc. Lb. 10c; 100 lbs. \$6.00

**FISH OIL SOAP.**—For aphid, plant lice, etc.

1 lb., 10c; 100 lbs., \$5.50.

**SULPHUR, Powder.**—

Lb., 5c; 100 lbs., market price.

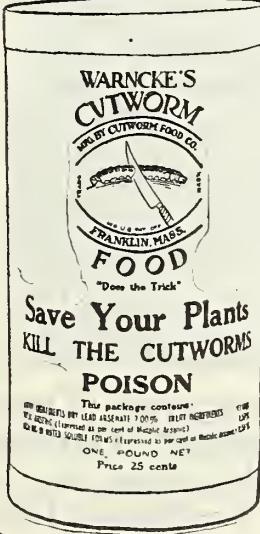
**TOBACCO STEMS.**—Lb., 5c; per 100 lbs., \$2.50.

**TOBACCO DUST.**—

Lb., 10c; 10 lbs., 75c; 100 lbs., \$5.75

**AVENARIUS CARBOLINEUM.**—For preserving any kind of timber above or below ground.

Quart can, 40c, wt. 4 lbs.; gal., \$1.50; 5 gals. \$6.00.



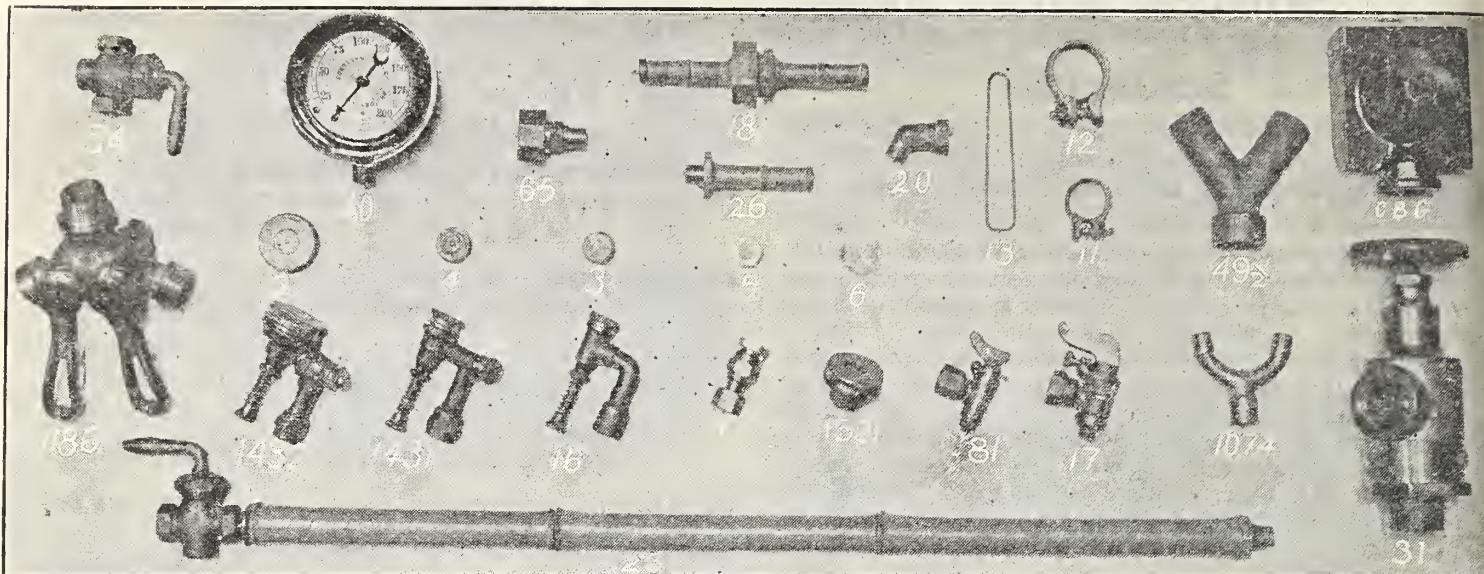
### Cut Worm Food

Use a teaspoonful to a plant or hill.

Cut Worms are very fond of this special preparation which is eagerly eaten by them in preference to the plants. A careful test proved 95% of the applications effective on Melons, Cucumbers, Cabbage, Cauliflower, Squash, Tomato and Flowering Plants. Easily applied by sprinkling around the plants and will not injure them in any way.

Price, 1 lb. pkg., 25c.

Mailing Weight, 1 1/4 lbs.



## "DIAMOND QUALITY" BEE SUPPLIES FOR WESTERN BEE KEEPERS

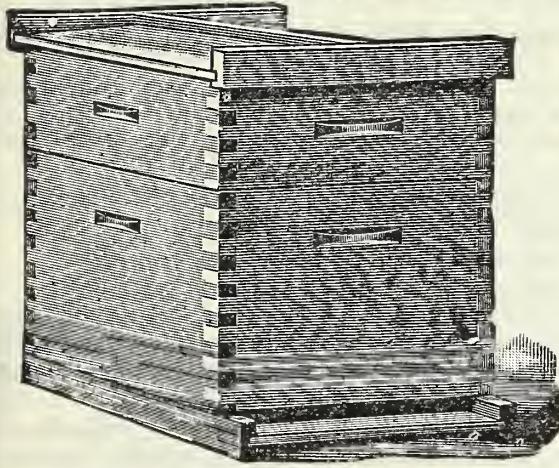
**WE ARE THE PIONEERS** in the Bee Supply business in the Northwest, are thoroughly familiar with local conditions and requirements and if you are new to the business or the country we can be of much help in saving you any unnecessary outlay, work or loss of time and can start you on the right road to success.

**STOCKS ARE LARGE** and complete and we can fill any size order on short notice and will give the small order just as careful attention as the larger one.

**THE A. I. ROOT CO'S HIVES AND SUPPLIES** well-known the world over as the standard of excellence are always on hand for prompt delivery at lower prices than you can purchase them for direct as we are agents for the Root Company and give our customers the advantage of car rates.

**WESTERN PINE AND CEDAR HIVES** made to our order in standard sizes and designs; of first class material and workmanship, are very popular with local bee keepers. Our Western lumber is satisfactory and lasting and we recommend them as being economical and serviceable.

### Portland Seed Co.'s Western Cedar Hives



These cedar hives are made especially for our Western trade. In construction they are the same as our pine hives, the only difference being that they are made of a superior quality of cedar, the best and most lasting wood for our Western climate. The sections and separators used in the supers are the regular No. 1 Eastern stock. Price and quality considered, these hives are splendid bargains.

PRICES.	Each	K. D.	Packed.	Weight
	Nailed	5	10	of 10.
No. 1-8 . . . . .	\$2.15	\$10.00	\$19.00	275
No. 2-8 . . . . .	1.95	9.00	17.00	250
No. 1-10 . . . . .	2.35	11.00	21.00	270
No. 2-10 . . . . .	2.15	10.00	19.00	252
No. 10-8 . . . . .	2.50	11.35	21.50	300

For description of numbers, see those given for our pine hives at bottom of page.

### P. S. Co.'s Dovetailed Western Pine Hives

This is our lowest priced hive and is the best value we can offer. It is standard size and well and carefully made of first-class lumber. The inside fixtures are just the same as in our regular pine hives, and the sections supplied are of the best grade of white Eastern basswood. For general description of the different numbers see corresponding numbers and descriptions under Eastern Pine Hives, bottom of page.

Each K. D. Packed. Weight.									
Nailed	Nailed	5	10	of 10	5	10	of 10		
No. 1-8 . . . . .	\$2.00	\$9.25	\$17.50	280	No. 2-8 . . . . .	\$1.80	\$8.25	\$15.50	265
No. 1-8, less Super	1.40	6.45	12.25	205	No. 2-8, less Super	1.35	6.10	11.75	195

### P. S. Co.'s Dovetailed Eastern Pine Hives

#### Descriptions and Prices

**Order by Number. Five Hives at Same Rate as Ten.**

**No. 1. Dovetailed Hive.**—(Complete with 1 super) consists of 1 bottom board, 1 body, 1 super, 1 cover, 8 Hoffman brood frames, 1 division board, 2 tightening springs for super, 6 section holders, 6 slotted separators, 24 sections and foundation starters for frames and sections and nails.

**Nailed, \$2.55 each; per 10 K. D. flat, \$23.00.**

**No. 2. Dovetailed Hive** is the same as No. 1, less sections and foundation starters.

**Nailed, \$2.35 each; per 10, K. D. flat, \$20.50.**

**No. 3. Dovetailed Hive** is the same as No. 1, except it has two supers instead of one.

**Nailed, \$3.40 each; per 10, K. D. flat, \$30.50.**

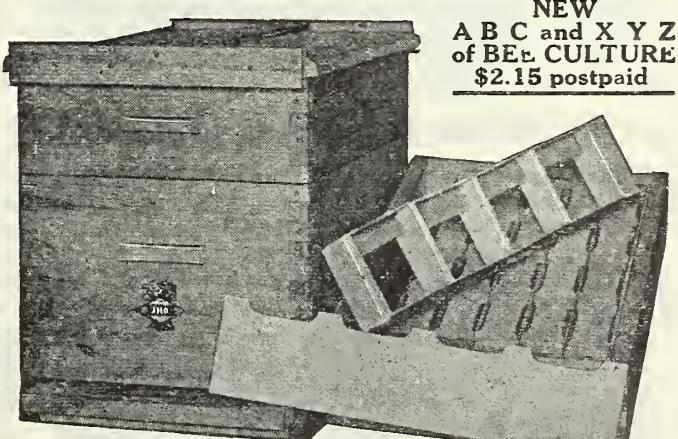
**No. 4. Dovetailed Hive** is the same as No. 3, less sections and foundation starters.

**Nailed, \$3.05 each; per 10 K. D. flat, \$26.50.**

**No. 10. Dovetailed Hive** (complete two-story for extracting), consists of one bottom board, 2 bodies, 1 cover, 16 Hoffman brood frames, 2 division boards and nails.

**Nailed, \$2.80 each; per 10 K. D. flat, \$24.50.**

This hive is similar to the Root Dovetailed Hive except that it is made from a little different kind of Eastern Pine, but is first class.



NEW  
A B C and X Y Z  
of BEET CULTURE  
\$2.15 postpaid

AE64S Hive for 4 1/4-4 1/4-1 1/8 Sections

 We advise the use of the above combinations, but if you want sections or separators of other designs, make note in your order.

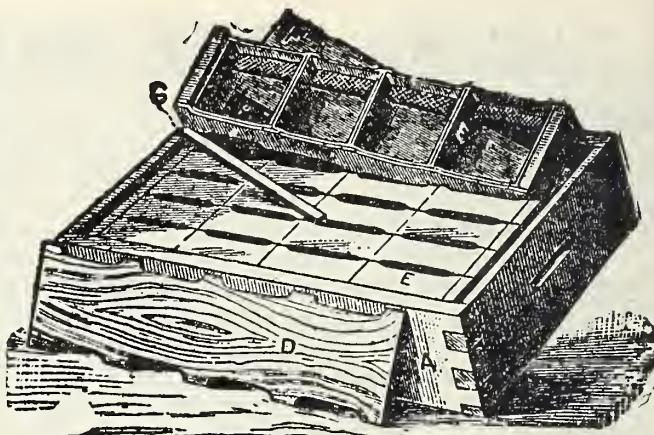


### Portland Seed Co.'s Dovetailed Supers

Unless otherwise ordered we always send S super for the regular stock  $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$  sections and wood separators. (See cut.)

Nailed P'ck'd in Flat Wt.  
or K. D. 5 10 of 10

No. 1-8 Pine	.....	\$0.95	\$4.10	\$7.75	75
No. 1-8 Western Pine	...	.85	3.80	7.00	75
No. 1-8 Cedar	.....	.90	4.00	7.50	70
No. 2-8 Pine	.....	.80	3.25	6.25	65
No. 2-8 Western Pine	...	.65	2.85	5.25	65
No. 2-8 Cedar	.....	.70	3.00	5.75	60
No. 8-8 Extracting Super.	...	.80	3.75	7.00	80
No. 0-8 Empty Wes'n Pine	...	.30	1.45	2.65	40
No. 0-8 Pine	.....	.35	1.75	3.25	40
No. 0-8 Empty Cedar	....	.35	2.75	3.00	40



Super, Designated as No. 4 or 1-S—Complete.



For Description of Super Number See Corresponding Number Describing Hives.

### Root's Hive Combinations and How to Understand Them

To accommodate various localities and bee keepers of different preferences, we have a large number of different combinations, and each combination is indicated by a series of letters and figures. A glance at the following table showing the meaning of each letter or figure in alphabetical and numerical order will make all plain.

- A. Danzenbaker bottom.
- E. Excelsior cover.
- G. The gable cover.
- I. Super for Ideal plain sections,  $3\frac{5}{8} \times 5$ .
- M. Super  $4 \times 5$  plain sections for the Danz. hive.
- P. Super equipped for plain  $4\frac{1}{4}$  sections.
- Rc. Metal roof, double cover.
- S. Super for  $4\frac{1}{4}$  beeway sections.
- 2. Super with section holders, separators or fences, but no sections or foundation.
- 4. Super with section holders, separators or fences, sections and foundation starters.
- 5. Hive body or brood chamber, with frames and division board but no starters.
- 6. Hive body or brood chamber with frames, division board, and foundation starters.

7. Complete Hive Body with full sheets of foundation, without cover or bottom.

8. Indicates hive with 8 brood frames.

10. Indicates hive with ten brood frames.

When the figures are doubled, it indicates that two of the articles are called for. For instance, 2-2P means two supers with plain section holders and fences.

If you desire a Danz. bottom-board, Excelsior cover, 8-frame dovetailed hive with frames, foundation and super with section holders,  $4\frac{1}{4}$  plain sections, fences and foundations, the number would stand thus: AE64P-8.

If you wish two supers, in place of the one you would add another figure 4, and the whole would read for 8-frame hive; or if you wanted this same combination without foundation or sections, the designation would be AE522P-8.

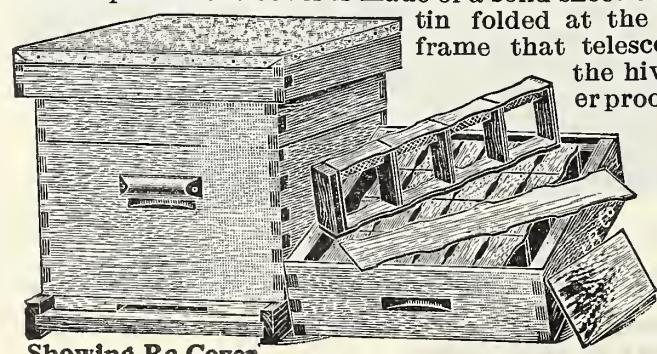
### Improved Appliances of the A. I. Root Co.

**DANZENBAKER HIVES.**—These hives take the same Cover, Bottom Board and Super as the ten-frame dovetailed hive, but the Brood Chamber is more shallow, taking ten closed end Brood Frames  $7\frac{1}{2}$  inches deep and 17 inches long; each is supported by a pivot in the center of the end bars, a great improvement, as the frames can be reversed and filled out to the ends; it also prevents bees mashing in handling.

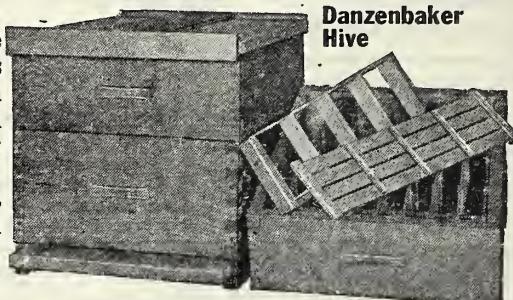
The Section Holder has the same kind of Pivot Support, and a fence separator is used. The Section is a plain  $4 \times 5 \times 1\frac{1}{8}$ , a size and shape that is very pleasing to the eye, and therefore a good seller. The arrangement in the super is such as to get perfect results in filling out the sections, and in no other hive are they so uniformly and attractively finished. While the Danz. Hive is more shallow than the standard Langstroth it has exactly the same Cubic Capacity as the eight-frame Dovetailed Hive. For prices see page 123.

#### Metal Roofed Double Cover—Rc.

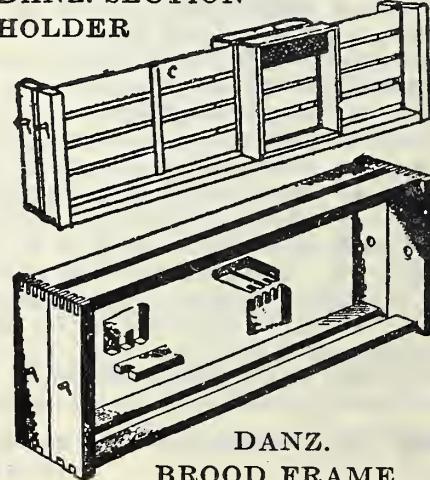
Consists of a  $\frac{1}{8}$  inch super cover, tin-bound, that should be supported a full bee-space above the sections; this is designated as c. The outside part of the cover is made of a solid sheet of lead coated roofing tin folded at the corners around a frame that telescopes over the top of the hive making a weatherproof cover that will not blow off, warp or leak. This top is the R part of the combination cover listed and sold complete as Rc.



Showing Rc Cover



DANZ. SECTION HOLDER



Add 25c per  
hive when Rc  
cover is ordered

## Dovetailed Hives and Fixtures—Continued

Root's Dovetailed Pine Hives—Different Combinations	Each Nail- ed	K. D.	in Flat	Wgt. of 10
HIVES		5	10	
<b>No. 1</b> (A-E or A-G, 6-4, S or P) 8 frame body and 1 super, all complete with starters.....	\$2.80	\$12.75	\$25.00	280
<b>No. 1</b> (A-E or A-G, 6-4, S or P) 10 frame body and 1 super, all complete with starters.....	2.95	13.50	26.50	320
<b>No. 2</b> (A-E or A-G, 5-2, S or P) 8 frame body and 1 super, all complete less section and starters.....	2.50	11.25	22.00	260
<b>No. 2</b> (A-E or A-G, 5-2, S or P) 10 frame body and 1 super, all complete less sections and starters.....	2.65	12.00	23.50	300
<b>No. 3</b> (A-E or A-G, 6-4-4, S or P) 8 frame body and 2 supers, all complete.....	3.70	16.75	33.00	350
<b>No. 4</b> (A-E or A-G, 5-2-2, S or P) 8 frame body and 2 supers, all complete, less sections and starters.....	3.20	14.25	28.00	320
(A-E or A-G, 6,) 8 frame body only, with frames, division board and starters.....	2.05	9.15	17.75	195
(A-E or A-G, 5,) 8 frame body only, with frames, division board and no starters.....	1.95	8.75	17.00	190
<b>No. 10</b> (A-E or A-G, 5-5) 8 frame body, two story.....	2.90	13.00	25.50	320
<b>HIVE BOTTOM.</b>				
A-Danzenbaker bottom-8.....	.40	1.85	3.50	40
<b>HIVE COVERS.</b>				
E-Excelsior or G-gable cover-8.....	.50	2.25	4.25	40
<b>HIVE BODIES</b> (Brood Chamber).				
Empty body for 8 frames 9 1/2 inches deep with tin rabbets.....	.75	3.50	6.60	80
5-body-8, with frames and division board.....	1.10	5.00	9.75	130
6-body-8, with frames, division board and starters.....	1.15	5.25	10.15	135
<b>SUPERS</b>				
<b>No. 1</b> (4 P, S or I) 8, all complete with starters and Sections.....	1.00	4.50	8.60	75
<b>No. 1</b> (4 P, S or I) 10, all complete with starters and Sections.....	1.05	4.75	9.10	100
<b>No. 2</b> (2 P, S or I) 8, all complete, less starters and Sections.....	.85	3.15	7.00	65
<b>No. 2</b> (2 P, S or I) 10, all complete, less starters and Sections.....	.90	4.00	7.50	80
<b>No. 0</b> Plain supers, with flat tin; empty.....	.45	2.00	3.75	40
<b>DANZENBAKER HIVES</b>				
A E D, 6-4 M-10.....	3.35	15.25	30.00	330
A Rc D, 6-4 M-10.....	3.55	16.50	32.00	
A E D, 5-2 M-10.....	3.05	13.75	27.00	300
A Rc D, 5-2 M-10.....	3.25	15.25	29.00	
A E D, 5-10.....	2.05	9.00	17.50	200
<b>SUPERS.</b>				
Danz. 4 M-10 super.....	1.35	6.25	12.00	120
Danz. 2 M-10 super.....	1.20	5.50	10.50	100

Note.—D, Danzenbaker cover, M, Danzenbaker super.

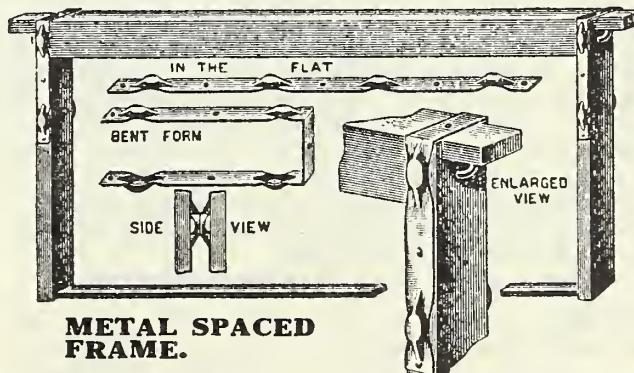
## Hoffman Brood Frames

The Hoffman Improved Foundation Fastening Frames (see cut) are the latest, most satisfactory brood frames. The top bar is made with a beveled strip, which holds the foundation absolutely in place, perfectly straight and exactly in center of top bar. Any one can put foundation in these new frames very rapidly.

### PRICE OF HOFFMAN FRAMES.

	Wt. per 10	Per 10	Per 100
Improved F. F. Root's	4 1/2 lbs	40c	\$3.50
Improved F. F. P. S. Co.'s	4 1/2 lbs	35c	3.25
Western,	4 1/2 lbs	35c	3.00
Half Hoffman	2 1/2 lbs	30c	2.90
Danz, Reversible	2 1/2 lbs	40c	3.50

The Half Hoffman Frame is used in the Ideal super and for extracting only.



### New Metal Spaced Frame

Recommended where there is much propolis. Spacing is accurate and frames handle easily.

**Price, per 10, 50c; 100, \$4.25.** Wt. per 10, 5 lbs.

**METAL SPACERS ONLY**  
Per 100 Pair Wt. 1 1/4 lbs. \$1.00

## Section Holders

Six section holders with separators, one follower and wedge are put in each 24-lb. super, and each section holder holds four one-pound honey boxes. The bottom strip is 1/4-inch thick, and is cut out to fit insets of the slotted sections—the style generally used.

**Root's** 1 1/8x18 1/8 inches, slotted, Wt. 23 lbs. per 100  
Each, 3c; per 100, \$2.75

**Western**, 1 1/8x18 1/8 inches, slotted, Wt. 29 lbs per 100  
Each, 3c; per 100, 2.20  
**Root's**, 1 1/2x17 1/2 inches, plain, Wt. 15 lbs. per 100  
Each, 3c; per 100, 2.40  
**Danzebaker**, reversible, Wt. 24 lbs. per 100  
Each, 4c; per 100, 3.00

### Bottoms only—

1 1/8 in. wide, slotted, Wt. 11 lbs. per 100  
Each, 2c; per 100, 1.50



## Section Honey Boxes

**Our No. 1 Sections** are made of the choicest white basswood lumber, and are all perfect in finish and free from defects. They are not all snow-white, but vary from that to a light cream color. Choice honey shows off to best advantage in a section not too white, as it is the honey rather than the wood that the consumer looks at. Wt., 6  $\frac{1}{4}$  lbs. per 100.

**Root's No. 1, best white,**  
per 100, 75c; per 500, \$3.25; per 1000, \$6.25

**Portland Seed Co.'s No. 1,**  
per 100, 70c; per 500, \$3.00; per 1000, \$5.75

**Our No. 2 Sections**, selected from our best grade, sell at a price considerably less than our No. 1, and are correspondingly lower in quality. Most of them are equal to No. 1, except in color; some have dark spots, sawmarks, or other blemishes which exclude them from No. 1 grade. Wt., 6  $\frac{1}{4}$  lbs. per 100.

**Root's No. 2, second grade,**  
per 100, 70c; per 500, \$3.00; per 1000, \$5.75

**P.S. Co's No. 2.** Wt. 6  $\frac{1}{4}$  lbs. per 100. Per 1000, \$5.25

Order any of the following sizes wanted. We have 4  $\frac{1}{4}$ x4  $\frac{1}{4}$ x1  $\frac{1}{8}$ , generally used and always sent unless otherwise ordered; 4  $\frac{1}{4}$ x4  $\frac{1}{4}$ x7 to the foot; 4  $\frac{1}{4}$ x4  $\frac{1}{4}$ x1 15-16; 4  $\frac{1}{4}$ x4  $\frac{1}{4}$ x1  $\frac{3}{4}$ . The 4  $\frac{1}{4}$ x4  $\frac{1}{4}$ x1  $\frac{1}{8}$ , 3  $\frac{5}{8}$ x5x1  $\frac{1}{2}$ , and 4x5x1  $\frac{1}{8}$  plain sections, having no beeway, are 25c per 1000 less.

### Different Styles of Sections.



Style 1 Beeway, commonly called closed-top.



Style 2 Beeway, open top and bottom.  
This style is sent when no other is specified.



Style 3 Beeway, open three sides.



Style 4 Beeway, open on all four sides.



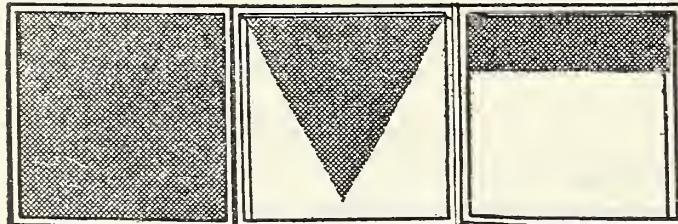
Style 5 Plain, no beeways. Used with fences.



Style 5M, 4x5x1 1/8 plain, no beeways.

For large quantities, other sizes, etc., write for special prices. If ordered by mail, allow 1c each for postage. Sample section, by mail, 1c each.

## Comb Foundation



Full Sheet, Triangular and Quarter Sheet Method of Using Foundation.

There is little question but that it pays to use foundation in full sheets in the brood frames and sections, especially the latter. If you think you cannot afford so much you should at least have a strip for a starter. It will help much more than it costs you, in getting straight, even combs. You can use a starter any width from one inch up.

Our foundation is made by the "Weed process," and is a very superior article. Packed in 1, 2, 3 and 5-lb. cardboard boxes in a case.

### PRICES OF COMB FOUNDATION

When you order, be sure to tell what grade you want, and give price.

GRADE	Size of Sheets	No. per lb.	In Lots of 1 lb.	10 lbs.
Light Standard Brood	7 $\frac{3}{4}$ x16 $\frac{1}{8}$	7	\$0.70	\$0.68
Extra Light Brood	7 $\frac{3}{4}$ x16 $\frac{1}{8}$	9	.73	.70
Light Section	3 $\frac{1}{2}$ x15 $\frac{1}{2}$	28	.75	.73
Extra Light Section	3 $\frac{1}{2}$ x15 $\frac{1}{2}$	30	.80	.76

*Write for lowest market prices on larger orders.*

**\$14.50**

**BEGINNERS' OUTFIT**

**\$14.50**

To the inexperienced we recommend the following complete equipment, including the Bees, and all that is necessary to properly care for them: One copy A B C and X Y Z of Bee Culture, new edition. One No. 1-8 P. S. Co.'s Dovetailed Western Cedar Hive. One Colony of Italian Bees in Dovetailed Hive. One Clark Cold Blast Smoker. One Parker Foundation Fastener. One Porter Bee Escape Mounted. One Pair Long Cotton Gloves. One Bee Veil No. 2.

**All Complete, F. O. B. Portland, \$14.00**

**FREE**

We include with this outfit one year's subscription to "Gleanings in Bee Culture." The Best Bee Magazine published.

**BEES MUST GO BY EXPRESS**—A colony weighs about 40 pounds.

**THE SUPPLIES CAN GO BY FREIGHT** and weigh, packed for shipment, 40 pounds.

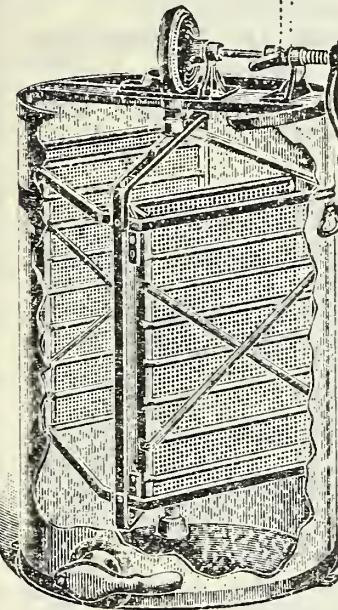
## PRICE LIST OF SHIPPING CASES

	Nailed	Flat
Non-Drip—	Each	
12-lb .....	\$0.20	\$1.70
24-lb., Western .....	.25	2.10
24-lb., Eastern .....	.30	2.50
24-lb., for 3 $\frac{5}{8}$ x5 Sections .....	.30	2.35
32-lb., for 1 $\frac{1}{2}$ -inch Sections .....	.30	2.50
24-lb., for Danzenbaker Sections ..	.30	2.35

## Hive Fixtures and Supplies—Continued

### Honey Extractors

Ball bearings and slip gear devices are furnished on all of our Extractors.



No. 15 Two-frame Reversible Cowan

### THE NEW ROOT AUTOMATIC EXTRACTOR

No. 25-B. Fitted with a brake that reverses the frames instantly without jar or injury and without stopping. This is an exclusive feature of the Root Automatic. We furnish the 4 frame size. Weight 210 lbs.

Price, \$39.50.

### No. 5-B, NOVICE.

Two frame for any size frame not over 9 1/2 by 18 1/2 inches; weight, 45 pounds.

Price, \$13.75.

### No. 15-B, COWAN REVERSIBLE.

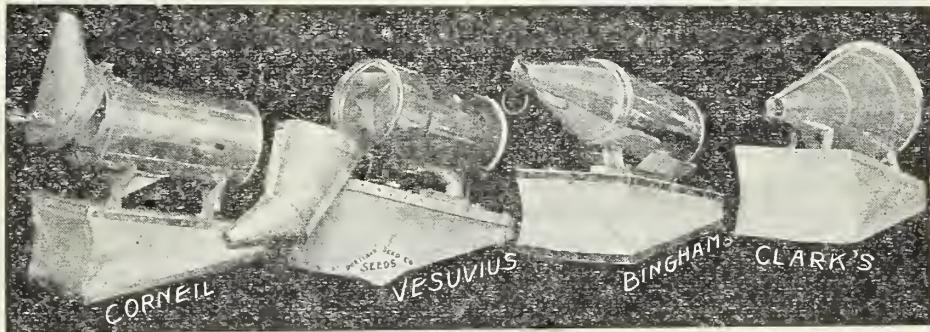
Two Frame. Weight, 85 lbs. Price, \$20.00

### Smokers

(See cut.)

Every owner of a hive of bees should have a smoker. A few blasts of smoke will quiet the bees so that they can be handled with safety. (See cut of the leading kinds.)

Clark's Cold Blast. Probably the most popular smoker in use today. Weight 1 1/4 lbs. Price, 70c.



### Improved Corneil.

Makes a good strong blast. The most satisfactory and servicable smokers.

Standard size, 3 1/4-inch, weight 2 lbs., \$1.00.

Standard Jumbo, 4-inch, weight 2 lbs., \$1.50.

Standard Copper, 3 1/4-inch, weight 2 lbs., \$1.75.

Junior, 2 1/2-inch, weight, 1 1/2 lbs., 80c.

Danz, Victor. Combined hot and cold blast. Weight 1 1/4 lbs. Price, \$1.10.

### Hive Parts

Division boards.

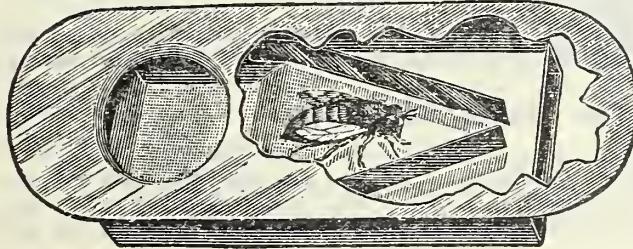
Each, 10c; 10 for 90c.

Followers

Each, 5c; 10 for 35c.

Tightening Spring.

Each, 1c; 10 for 8c.



### Porter Bee Escape

Great Labor-saver. Weight 2 ozs.

Price, 20c, postpaid.

Mounted. Weight 2 1/4 lbs., Each, 40c.

### Bee Entrance Guards

Root's or Tinker's. These are to admit workers, but exclude drones. Weight 1/4 lb. Price, 15c.

Improved Wire Front, Price, 20c; by mail, 25c.

Alley's Drone and Queen Trap

A non-swarming device. Weight 1 lb. Each, 55c.

Improved Wire Front. Weight, 1 1/4 lbs. Each, 60c.

### Wax Extractors

Doolittle Solar Wax Extractor. With this the sun supplies the heat; weight 30 pounds.

Price, \$5.25.

Root's German Wax Extractor. Price, \$13.00

Hatch Wax Press. Price, \$7.50.

Swiss Wax Extractor. Comb is put in wire basket inside of can and set over hot water. Simple and good. Price, \$4.00; with steam generator, \$5.00

### Porter Honey House Escape

No extracting room is complete without one or more of them. Each, 25c; postpaid.

### Foundation Fasteners

Parker's. A satisfactory and servicable tool. Weight, 1 lb. Price, 40c

Daisy Foundation Fastener. Will put starters in better and faster than any machine before introduced. Weight, 5 1/2 lbs.

Price, without lamp, \$1.15; with lamp, \$1.40.

Van Deusen Wax Tube Fastener. Price, 20c; by mail, 25c.

### Wire Imbedders

The Easterday. Weight 4 ozs.

Price, 20c; by mail, 25c.

Spur Wire Imbedder. Teeth set so as to straddle the wire while imbedding it. Weight, 4 ozs.

Price, 20c; by mail, 25c.

### Wire Imbedders

### The Easterday

Weight 4 ozs.

Price, 20c; by mail, 25c.

### Spur Wire Imbedder

Teeth set so as to straddle the wire while imbedding it. Weight, 4 ozs.

Price, 20c; by mail, 25c.

### Bingham Smokers

Strong, well made. The "Conqueror" and "Doctor" not excelled for use in large apiaries.

Bingham Conqueror. Weight 1 lb. . . . . 95c.

Bingham Little Wonder. Weight 1 lb. . . . . 60c.

Bingham Doctor. Weight 1 1/2 lbs. . . . . \$1.15.

Bingham Large. Weight 1 lb. . . . . 75c.

Bingham Engine. Weight 1 1/2 lbs. . . . . 1.40.

### Feeders

Alexander. Latest out. Used under rear end brood chamber. Weight 1 1/4 lbs. Price, 30c

Simplicity. Weight 6 ozs.

Each, 10c.

Milier's. Sets on hive like a super; holds about 25 pounds of syrup. Weight 5 lbs. K. D.

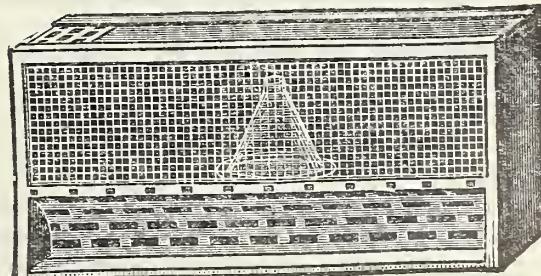
Nailed up complete, 40c; in flat, 35c.

Boardman's. Weight 1/2 lb.

Price, 25c; without jar, 20c.

Division Board Feeders. Weight 1 3/4 lbs.

Each, nailed, 30c.



Alley's Combined Drone and Queen Trap



# Hive Fixtures and Supplies—Continued



## Bee Brushes

**Coggshall's.** (See cut). Price, 20c; by mail, 25c  
**Dixie.** (See cut). Price, 20c; by mail, 25c

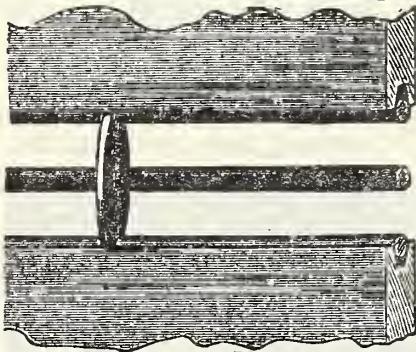
## Gloves, Rubber

**Ladies.** Sizes 7, 8, 9. Price, \$1.25; by mail, \$1.35.  
**Men's.** Sizes 10, 11, 12. Price, \$1.50; by mail, \$1.60  
**Men's Half Long.** Sizes 13, 14, 15. Price, \$1.75; by mail, \$1.85.

**Cotton—Long Sleeves.** Price, 65c; by mail, 70c.  
**Note.**—To insure getting proper size, mark outline of hand on sheet of paper.

## Honey Boards

Used to confine the queen to the brood chamber. Nos. 1 and 11 are unbound zinc. Nos. 12 and 13 are wood-bound with a bee space one side.



**NEW  
STYLE  
WOOD AND  
WIRE  
HONEY  
BOARD**

No sharp edges for the bees to pass over.

**No. 11. 8-frame, unbound, 12x19 1/2 inches.**  
 One, 25c; ten, \$2.00.  
**No. 1. 10-frame, unbound, 14x19 1/8 inches.**  
 One, 25c; ten, \$2.10.  
**No. 13. 8-frame, wood-bound, 13 1/8x20 inches.**  
 One, 30c; ten, \$2.50.  
**No. 12. 10-frame, wood-bound, 16x20 inches.**  
 One, 30c; ten, \$2.75.  
**No. 8. 8-frame, wood and wire, 13 1/8x20 inches.**  
 One, 40c; ten, \$3.75.  
**No. 7. 10-frame, wood and wire, 16x20 inches.**  
 One, 45c; ten, \$4.00.

## Perforated Zinc

Used for making honey boards, also entrance guards, queen and drone traps, etc.

**Perforated sheets, each, 32x96.** Weight 6 lbs., \$2.00. Less than a sheet, per square foot, Weight 4 1/2 ozs., 15c.

## Manum's Swarming Device

A most complete swarming device. The swarmer is light, conveniently carried, and will reach a swarm 20 feet from the ground. Complete, \$1.75 wire basket, with ball, no pole, \$1.35. Weight 3 1/2 lbs.

## Miscellaneous

**Queen Cell Protector.** Doolittle. Each, 3c; by mail, 5c.  
**West's Cell Protector.** Each, 8c; 10 for 65c; by mail, 75c.  
**West's Spiral Cage.** Each, 10c; 10 for 80c; by mail, 90c.  
**Hive Clamps, per pair, 5c; 10 pairs, 40c.** without screws, 10 pairs, 35c. Add 3c per pair postage.  
**Hill's Device.** For covering frames in winter. Each, 10c; 10 for 75c; postpaid, \$1.00.  
**Hubbard Section Press.** Price, \$3.25.  
**Root's Section Press.** Price, \$2.10.  
**Hive Tent, weight 6 lbs.** Price, \$3.00.

## Honey Knives

**Novice.** Price, 85c; by mail, 95c.  
**Quinby.** Price, \$1.00; by mail, \$1.10.  
**Bingham.** Price, 80c; by mail, 90c.  
**Honey Knife.** Broad square blade. Price, 15c; by mail, 20c.

## Cages for Queens

**Benton.** For mailing and introducing. Each, no candy, 5c; by mail, 7c; with candy each, 10c. by mail.

## Root's Queen Rearing Outfit

A complete set of tools and materials, including book of instructions, enabling any one with very little experience to rear his own queens at small expense. Price, \$4.75.

## Queen Bees and Colonies

We are in a position to furnish full-blooded Italian queens, and full colonies. It takes about five days to get these in from the apiary, so do not expect queens by return mail.



**Untested Queen.** April, \$1.75; May, June, July, August, September, \$1.25.

**Tested Queen.** April, May, June, July, August, September, \$2.00.

**Selected Tested Queen.** April, \$3.50; May, June or July, \$2.50; August or September, \$3.00.

**Full Colony.** In an 8-frame hive. Price, \$8.00.

## Bee Veils

**Globe.** Has five bars that will keep veil away from head. Weight, 6 oz. Price, \$1.00.

**Hat Veil.** These veils have a rubber band round the top, so as to fit the hat snugly.

**No. 1 Veil, made entirely of silk tulle.** 90c., postpaid.  
**No. 2 Veil, cotton tulle, silk face.** 65c., postpaid.  
**No. 3 Veil, cotton tulle throughout.** 50c., postpaid.  
**Alexander.** 80c., postpaid.



## No. 30 Tinned Wire

**3/4-ounce spools.** Each, 5c; dozen, 45c.  
**1/4-pound spools.** Each, 15c; dozen, \$1.50.  
**1/2-pound spools.** Each, 25c; dozen, \$2.25.  
**1-pound spools.** Each, 35c; dozen, \$3.45.  
**5-pound coils.** Each, \$1.35.

## Bee Supplies

### TIN RABBETS

**Price:** 12-inch ..... Per 10, 15c; per 100, \$1.40.  
 14-inch ..... Per 10, 15c; per 100, \$1.40.  
 15-inch ..... Per 10, 20c; per 100, \$1.55.

### T-TINS

**Price:** 12-Inch ..... Per 10, 15c; per 100, \$1.40.  
 13-Inch ..... Per 10, 15c; per 100, \$1.40.  
 14-Inch ..... Per 10, 15c; per 100, \$1.40.  
 16-Inch ..... Per 10, 20c; per 100, \$1.55.  
 18 to 20-Inch Per 10, 25c; per 100, \$2.00.

### FLAT TINS

**Price:** 12-Inch ..... Per 10, 10c; per 100, 60c.  
 13 1/2-Inch ..... Per 10, 10c; per 100, 60c.  
 14-Inch ..... Per 10, 10c; per 100, 60c.  
 15-Inch ..... Per 10, 10c; per 100, 75c.

# “MANDY LEE” Incubators for 1915

Heat Quickly

Run Evenly

Regulate Automatically

THEY DO NOT DEPEND UPON YOUR SKILL OR EXPERIENCE

 YOU SIMPLY FOLLOW INSTRUCTIONS — Your success is sure if the eggs are good



**HIGH HEAT** must have

**LOW MOISTURE**

**LOW HEAT — HIGH MOISTURE**

At 102 degrees, 50 to 55 % moisture is good, but for every degree of heat added moisture must drop 5 % to be safe.

The “Mandy Lee” is built to automatically meet these requirements; no other incubator can give as good results.

#### FRESH OXYGEN

Life giving oxygen is freely supplied at the egg level when the chicks are coming out, without losing the moisture or lowering the temperature.

#### EGG LEVEL VENTILATION

The new “Mandy Lee” has large ventilators in the lower part of the door, these openings are covered with finely woven brass wire cloth; through these ventilators fresh oxygen is constantly being supplied and the carbonic acid gas passing out. This diffusion of gases has no perceptible effect on the heat or moisture, but insures the chicks against suffocation at a time when the machine cannot be opened. The only perfect method of ventilation—no draft. No other incubator gives this important advantage.

**EGG TRAY** has a combined wire and slat bottom, and can be used either way. Large machines are furnished with sectional trays and one extra tray for turning. This enables you to turn the eggs quickly and to change trays to any position in the egg chamber.

The “Mandy Lee” is GUARANTEED to hatch Bigger Chicks, Stronger Chicks and More Chicks that live than any other incubator or even the mother hen.



#### READ —

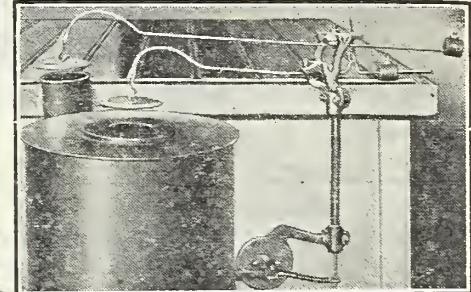
**WE GUARANTEE** that the new Mandy Lee Incubator, equipped with our new Automatic Regulator for handling Heat, Moisture, and Ventilation, will, on a series of competitive hatches of eggs taken from the same flock, beat any other incubator in the world from five per cent to twenty-five per cent and in any climate, season, or altitude.

We guarantee further that it will bring BETTER, LARGER, and STRONGER chicks; also, that it will bring MORE and BETTER chicks than can be had from hens covering the same number of eggs.

We guarantee our largest incubators to do equally as good work as any of our smaller sizes.

Our instructions must be followed and, in competitive hatches, eggs from the same flock must be used.

GEO. H. LEE CO.

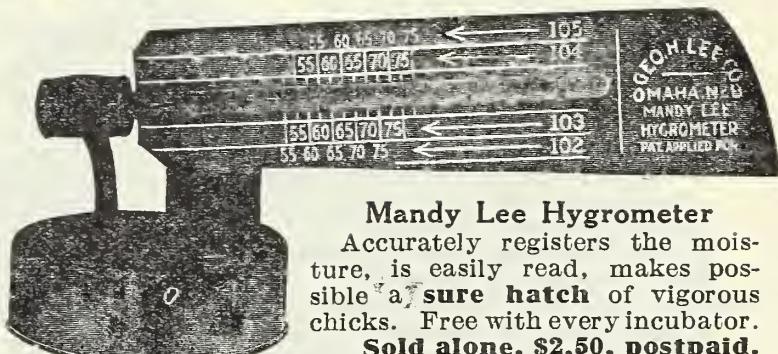


The new Automatic Regulator for Heat, Moisture and Ventilation. Direct ventilation of egg chamber if heat goes too high.

Be sure to write for the **LEE BOOKLETS**—FREE on REQUEST.

#### FOR HATCHING DUCKS

The “Mandy Lee” will give you better results than any other incubator—because of the perfect control and automatic regulation.



#### Mandy Lee Hygrometer

Accurately registers the moisture, is easily read, makes possible a sure hatch of vigorous chicks. Free with every incubator.

Sold alone, \$2.50, postpaid.

**NEW MOISTURE PAN** can be removed or refilled without opening incubator.

**DROP NURSERY BOTTOM** permitting removal of chicks without opening incubator.

**NURSERY TRAY** has a cloth bottom that can be turned up until the eighteenth day, thus cutting off the air space beneath the eggs.

**Special adjustment of egg tray, thermometer and nursery, making the “Mandy Lee” Incubator adaptable to any size egg, from Bantam to Ostrich.**

**"MANDY LEE" INCUBATORS—Continued****THE HEATING SYSTEM**

**THE HEATING SYSTEM** insures the same degree of heat to every egg and is an exclusive **Lee feature**. Heat can be adjusted from end to end, and in the larger sizes from center to back and front. The heating pipes can be removed instantly for cleaning by drawing them out without removing the top. The hot air does not come in contact with the eggs as in other hot air incubators, but warms them by radiation through the air-tight metal pipes. The control and adjustment is so perfect that the heat will vary but a fraction of a degree, even should the outside temperature change as much as 20 degrees.

**The features of the "Mandy Lee" Heater**

All parts exposed to heat are fully protected by sheet metal and asbestos.

A special burner with high wick tube and wide flame slot.

**NEW SINGLE WALLED CHIMNEY.**

Increases the heating capacity, reducing the oil expense and lowering the outside temperature of the heater. It is also self seating and is always in place.

**A LAMP BOWL IN ONE PIECE.**

**A SPECIAL VENT** for any gas forming in the lamp.

**A PERFORATED SHEET METAL CYLINDER** in top of heater which puts out the lamp in case of accident.

**A PROTECTING CIRCULAR SHIELD** guarding the body of the Incubator.

**A SELF-SEATING CHIMNEY.**

**AS A FURTHER PRECAUTION** the lamp cannot be filled without removing it.

The "Mandy Lee" is built of air-seasoned California redwood, is of handsome cabinet construction, with cherry finish, has heavy brass and bronzed metal trimmings, double glass doors and the double walls are insulated with from 1 1/2 to 3 inches of asbestos or mineral wool. **No other incubator is so well built.**

**Prices and Sizes of "Mandy Lee" Incubators**

All complete with Lamp, Hygrometer, Thermometer, Moisture Pan, Combination Egg Tray and Egg Tester. Prices quoted are packed for shipment F. O. B. Portland.

	Wt. Crated	Price
75-Egg—Mandy Lee Jr., for the beginner.....	80 Lbs.	\$13.00
120-Egg—The right size for the small breeder .....	133 Lbs.	21.00
150-Egg—The new size—convenient and economical.....	160 Lbs.	24 00
240-Egg—This size for the larger plants: much in demand.....	216 Lbs.	30 00
300-Egg—This is the ideal machine for large breeders .....	285 Lbs.	35.00

**MANDY LEE BROODERS**

**The Only Brooders That Provide Natural Broodings Conditions.**

**DIRECT CONTACT HEAT**

"Mandy Lee" Direct Contact Heat Brooders are the most successful and satisfactory made. No improvement seems possible; no change necessary. The idea of applying a soft contact heat direct to the backs of the chicks was never incorporated into anything practical until Lee began the manufacture of the "Mandy Lee," nor until that time had the correct principle of brooding been recognized, namely, that the little chick cannot comfortably breathe the same heat required for giving the necessary warmth to its body. We cannot better illustrate this theory than by repeating the following:

**FOR INSTANCE:** Some night when you are lying in bed snugly covered and comfortably composed for sleep, just put a thermometer under your clothing next to your body, and take the temperature of the air immediately surrounding your real self. You will find it to be somewhere between 95 and 98 degrees. Now suppose that instead of this method of comfortably warming yourself, you should go and lie naked in a room heated to even 95 degrees. You can imagine how uncomfortable you would be. Perhaps you may recollect some hot summer evening when you rolled and tossed all night, unable to sleep on account of the heat. This is because you cannot be either comfortable or healthy if your head is as warm as your body. **Buy a Brooder with Blankets.**

**THE HOVER**—A long, narrow hover—the ideal shape heated evenly from end to end by a triple set of overhead pipes, one pipe passing entirely through and carrying out all the smoke, gas, etc., from the lamp, which is located outside the brooder.

Again, a second pipe carrying cold, pure air into the hover, which is heated by the first pipe, and that heated air heats the blanket to the temperature of a hen's body.

The hover blanket is made of regular bed blankets, shaped in the form of a semi-circle, hanging loosely and in the center to within an inch of the floor, and with curtain front and back. (See sectional view.)

**SOFT-CONTACT HEAT**—Here is how the chicks get that soft, contact heat, so natural, so necessary to their comfort, and so entirely absent in other brooders.

The little chicks lay with their backs up against this warm blanket, just like a hen's body, and their heads out in the open air.

There is no crowding here, no smothering, no trampling. Each chick gets just as much heat as it wants and no more. In other brooders all the chicks must get the same amount of heat, but not so in the Mandy Lee. **It's a natural mother for them.**

**"Mandy Lee" Brooders Come in Seven Sizes and Styles**

**THE NO. 1, OR REGULAR:** which we recommend for all general purposes.

**THE NO. 2, OR SECONDARY,** fills a demand for a practical, economical method for caring for chicks from three to eight weeks old.

**THE 60 CHICK SIZE,** for use with the "Mandy Lee Jr."

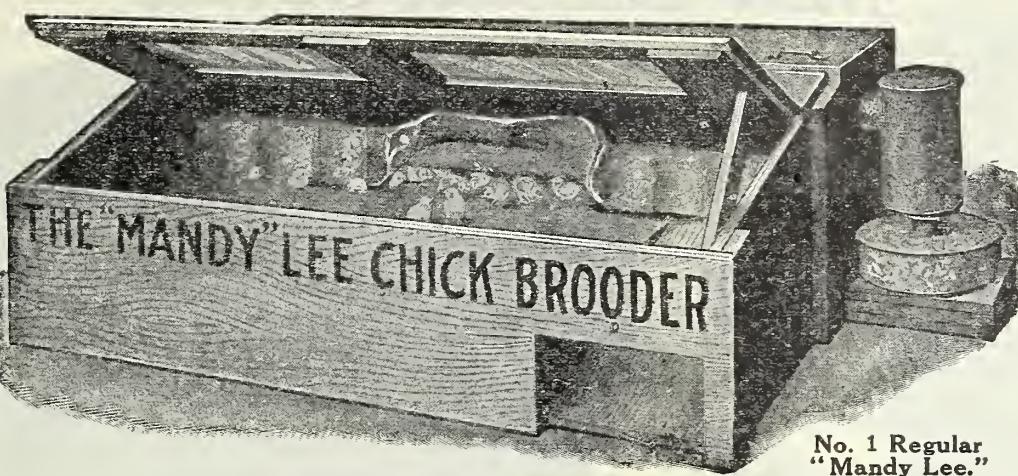
**2 Sizes of NEW FIRELESS BROODERS,** which have given splendid satisfaction, and are very popular as they are safe and economical.

**THE NEW OUTDOOR HEATED BROODERS**—See following pages.

## MANDY LEE BROODERS—Continued

"Hovers 'Em  
like a Hen."

FULL  
DETAILS  
IN THE  
LEE  
BOOKS  
FREE to you



Showing  
portion of  
Hover,  
Lamp,  
Extension-  
Chimney, etc.

No. 1 Regular  
"Mandy Lee."

## ADVANTAGES OF THE LEE BROODER.

No lamp fumes or superheated air in the hover.

Glass Front forming a comfortable exercising room for the little chicks, with similar space at back.

Opens up and cleans easily, an important feature.

All Cloth and Blankets are on wood strips, easily removable for cleaning or replacing.

Lamp Flame is always in plain sight, lamp easily removed.

A Lamp Burner that does not heat and that successfully burns medium grade oils.

## No. 1, or Regular "Mandy Lee"

Outside dimensions, 3x4 feet. It is as large as any 200-chick brooder on the market, but we call it only 100-chick size — 50 chicks on each side of the hover. It will hold more, but it doesn't pay to crowd. Better have 50 healthy chicks in your brooder than 100 weak, sickly ones. The cost of a few brooders is insignificant as compared to the value of the season's hatch.

PRICE, complete, including Box Germozone, Drinking Fountain and Thermometer, \$15.00.

60 CHICK BROODER  
Heated

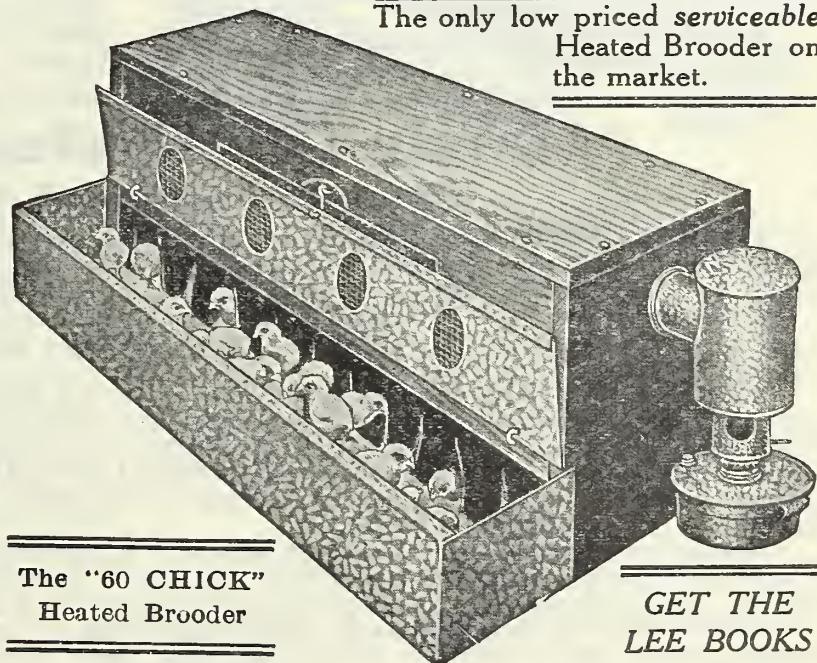
Lamp, heater, hover construction, cloth and metal parts, and width exactly the same as our "regular" brooder. Length of hover 30 inches; openings in swinging door covered with 60-mesh brass-wire cloth, and, when lowered either folds directly against hover opening or rests on flanged front of runway, making a rat and cat proof exercising space for the chicks.

Price, \$6.50.

GERMOZONE in the drink-  
ing water keeps chicks healthy

Liquid or Tablets. 50c

The only low priced serviceable  
Heated Brooder on  
the market.



The "60 CHICK"  
Heated Brooder

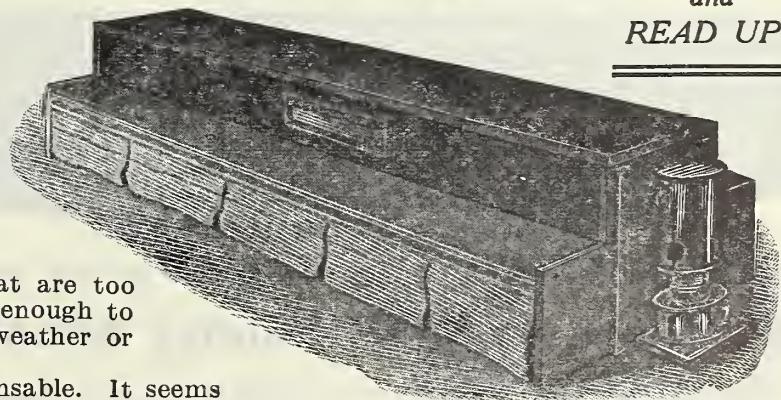
No. 2 Secondary  
Brooder

This is a larger, more roomy and less expensive brooder for older chicks or those from three to eight weeks of age. It is all hover, and, while occupying no more floor space than the other brooder, gives fully twice the actual brooding capacity.

It is simply a mother for the chicks that are too large for the ordinary brooder, but not old enough to "hustle for themselves" during the damp weather or cool nights.

Once used this brooder is almost indispensable. It seems to fit into a place no other brooder can occupy. It can be used anywhere—in a poultry house, barn, shed, piano box—just so it is protected from wind and storm. Price, \$9.50

GET THE  
LEE BOOKS  
and  
READ UP!



Mandy Lee Secondary, No. 2



## NEW LEE BROODERS

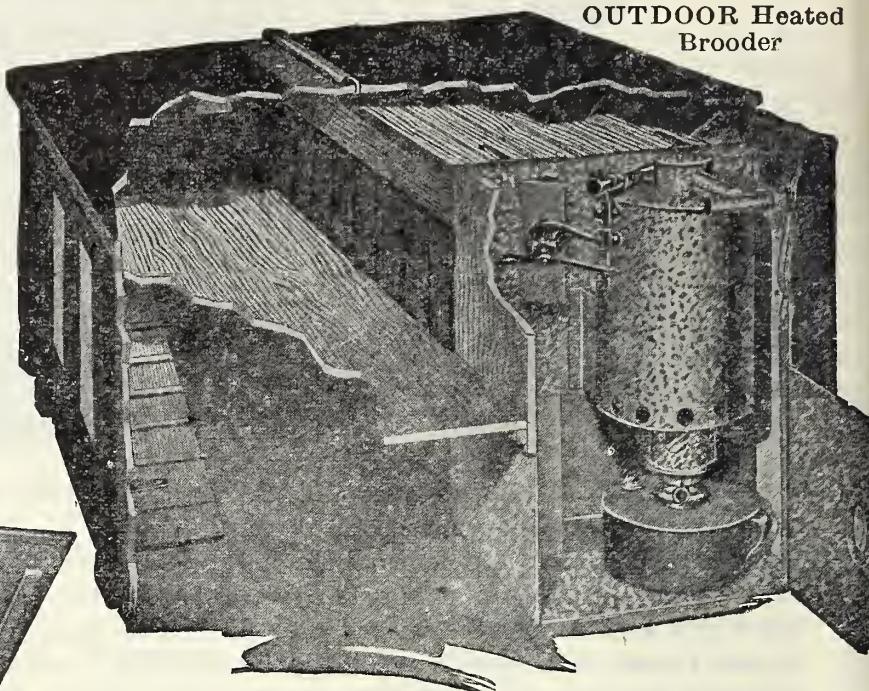
### OUTDOOR, HEATED and REGULATED BROODER

Instead of the usual single floor we have a double floor 3x4 feet, the lower floor being directly on the ground where the chicks come in contact with mother earth even in most inclement weather. We have the Mandy Lee contact heat under a warm Blanket — a long, narrow hover with a curtain on both sides — just like our regular brooder — just like the old mother hen. The regulator is the same style as on the incubator. Capacity 100 to 150. Weight 115 lbs.

Price, 4-foot size, \$20.00.



No. 25 OUT-DOOR FIRELESS BROODER



OUTDOOR Heated Brooder

### New Outdoor Fireless No. 25

Has rain proof top, glass front, large feeding compartment and removable board floor. A thoroughly practical and safe brooder. Size 2x4 feet, see cut.

Price, each, \$10.00.

### New Indoor Fireless

A fireless brooder for use inside, having the advantages of an adjustable hover that can be placed over the chicks, bringing them together gently and safely. A very convenient and useful brooder. See Lee catalog for complete details.

Price, each, 100 chicks size, \$4.00.

## “Mandy Lee Fireless Brooder” Safe, Economical, Practical

**FIRELESS BROODERS** offer many advantages in economy, safety and convenience, and under equal conditions will rear stronger, healthier, larger chicks than a heated brooder. We have had wonderful results with the “Mandy Lee” and recommend it as the **Best Fireless Brooder**.

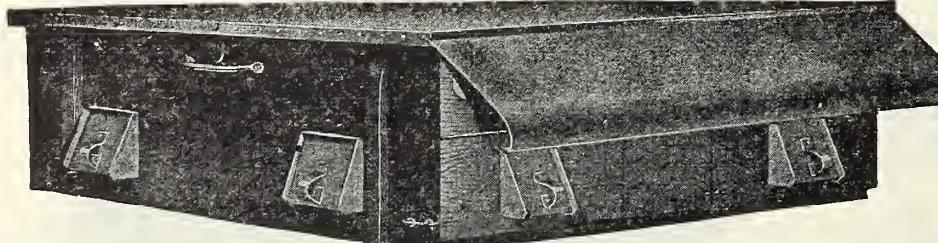
A feature of the “Lee Fireless” is the adjustable hover; made as light as possible, being a special weave of open mesh flannel stretched on a frame in such a manner as to give a proper circulation of air and even distribution of heat.

**THIS ADJUSTABLE HOVER** is the most important improvement in Fireless Brooders, and can be raised or lowered according to the outside temperature or to suit the size or number of chicks. The adjustment is easily made from the front of the Hover without opening the top.

Besides this new Adjustable Hover, “**MANDY LEE**” **FIRELESS BROODERS** have double doors, properly arranged ventilators, metal covered top and rain shield. All parts are readily accessible for cleaning and airing.

Fireless Brooders, like other brooders, should be kept in a place of even temperature as far as possible, and as the warmth depends on the natural heat of the body, enough chicks should be together to maintain the proper temperature. This can be regulated by the Adjustable Hover.

Don't overcrowd your Fireless Brooder; treat it like any other brooder and you will get larger, more vigorous chicks that feather out earlier than those raised in the heated brooders.



“Mandy Lee Fireless Brooders” are made in two Sizes:

No. 8, for 100 chicks.....\$6.00  
No. 10, for 200 chicks.....9.00

### Our Catalog of Poultry Supplies

Listing everything necessary for the profitable production of poultry and giving practical information on poultry diseases, care and treatment, should be in the hands of everyone interested in poultry.—Let us send you a copy.

The “**MANDY LEE**” Booklets contain more advanced, practical working knowledge on incubation than all other literature on this most important subject.

**FREE ON REQUEST**

## Miscellaneous Poultry Supplies

**"Diamond"**  
**Sanitary Self-Feeding Boxes**

Made of heavy galvanized iron; soon pays for itself in preventing waste of feed. For keeping grit, shells and charcoal before the fowls at all times. 3 compartments. Weight,  $2\frac{1}{2}$  lbs.

**Price, each, 75c. Large size, 2 compartments, Weight 3 lbs., each, \$1.00.**

**Mann's Swinging Feed Tray**

For water or feed. Fowls cannot scratch dirt into it, or feed out of it, nor roost on it; yet will not tip over or spill the food out.

**Price, 18-inch, weight,  $5\frac{1}{2}$  lbs., \$1.25; 27-inch weight  $6\frac{1}{2}$  lbs., \$1.50; 36-inch, weight, 8 lbs., \$1.85.**

**Diamond Galvanized Wall Fountain**  
(See cut.)

Something new and serviceable. To be hung on the wall or against an upright post, at any height. The patented construction protects the water from becoming soiled. Anyone can easily see the convenience of these.

One gallon size, weight 2 lbs.  
**Each, 60c.**

Two gallon size, weight  $2\frac{1}{2}$  lbs.  
**Each, 75c.**

**Sanitary Stone Fountain**

These are strong and well finished; made in two pieces and easily washed and kept clean.

They probably keep the water cooler than the galvanized fountains, but are heavier to handle and more liable to break.

**Price,  $\frac{1}{2}$  gal., 35c; 1 gal., 50c; 2 gal., 75c. Galvanized Fountains**

**Galvanized Iron Drinking Fountains**

Our Galvanized Iron Drinking Fountains embody every good feature of the down-to-date drinking fountains, and, we believe, are the best in use. They are easily filled, cleaned and kept clean. If placed in the shade in Summer time, the water will keep nearly as cool as in an earthen vessel. They are much lighter than the earthenware fountains and are safer to ship. A dozen can be put in compact package for shipment, as they nest together. We offer them at a very low price.

Small size, weight  $\frac{3}{4}$  lb....**Each, 30c; 6, \$1.70.**

Large size, weight  $1\frac{1}{2}$  lbs....**Each, 50c; 6, \$2.75.**

Medium size, weight, 1 lb....**Each, 40c; 6, \$2.25.**

Extra Pans.....**15c to 25c.**

**Wire Hen's Nests**

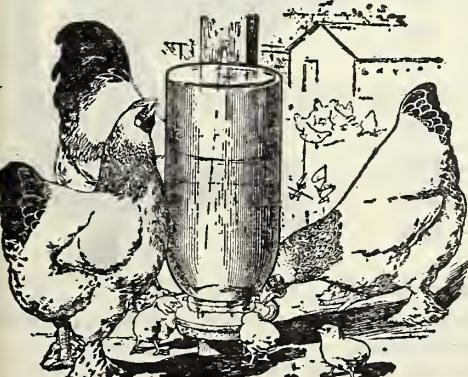
(See cut.)

Strongly made; very durable; fasten to the wall; no harbor for vermin. Weight 10 ozs. each. **Price, each, 20c; dozen, \$2.00.**

**Lime Nest Egg**

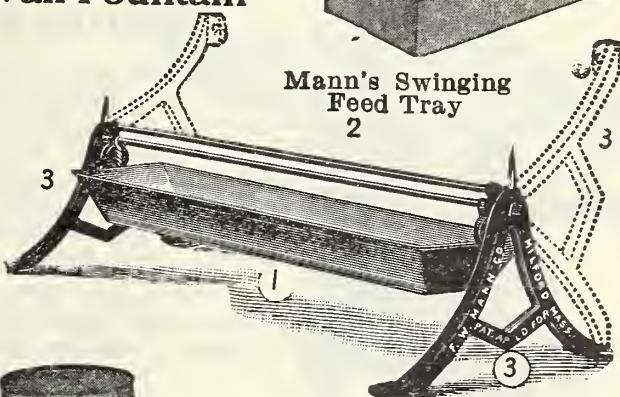
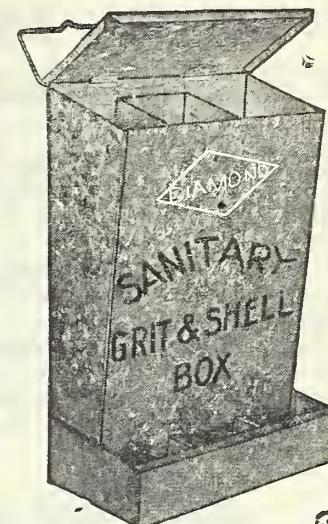
These are superior to the China egg as they are not so cold, which is better for the hens. They are also indestructible. Weight per doz., 2 lbs.

**Price, each, 5c; doz., 40c; postpaid, each, 10c.**

**THE "ALL-RITE"****Sanitary Fountain and Feeder.**

For water, grit, chick food or grain, using ordinary Mason jar, either quart or half gallon. Has galvanized pan that is quickly detachable. The best fountain of this type. Price, one size only, without jar, weight  $\frac{1}{2}$  lb. each.

**Each, 20c; doz., \$2.00.**



**Wire-Covered Feeding Trough**  
Decidedly convenient for young chicks. (See cut.) **Weight, 1 lb.**

**Price, 35c.**

**China Nest Eggs**

Best grade Opal Eggs. Weight per doz.,  $\frac{3}{4}$  lb.  
**Price, 3 for 10c; 12 for 35c.**

**Diamond Hygiea Lice-Killing Nest Egg**

A combined nest egg and lice killer. By simply using it in the nests in the same manner as an ordinary nest egg is used, laying hens are cleared of lice and mites, and are able to occupy the nests with comfort. Do not accept the worthless substitutes. **Price per doz. 60c, wt. 2 lbs.; price each, postpaid; 10c.**





# MANN BONE CUTTERS

**The Only Bone Mill That Will Cut Both Green and Dry Bone.  
Will Not Clog.**

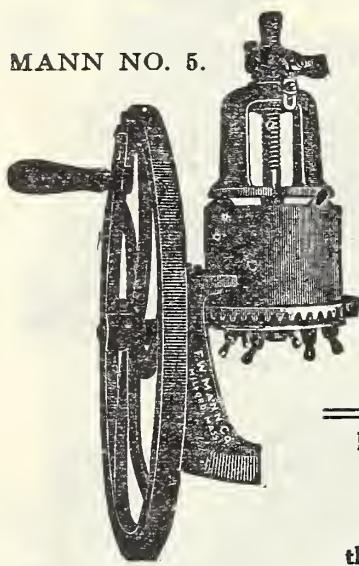
THE Mann's Green Bone Cutter is offered to the poultry world on a warranty to produce a perfectly edible poultry food, with no waste, from any lot of green bones, with less labor and less annoyance than any other bone cutter.

We send the Mann's to any responsible poultryman with this understanding; if you are not satisfied that it meets every claim we make for it, notify us and we will give you instructions to return the machine, and will, upon receipt of same **refund purchase price**. Could you ask more?

The Mann's is the only machine which has a self governing feed, producing uniform pressure against the knife, whether the bone be hard or soft. You set the machine to suit your strength, and it never requires more power than you set it for.

## Mann's No. 5

MANN NO. 5.



Has four knives, large solid cylinder, and has the latest patent automatic governing spring feed which makes it one of the best low-priced bone cutters ever offered. We can furnish with crank, balance wheel, or mounted on iron stand. (See cut.)

Mechanism of the Mann's showing automatic force-feed, cylinder parts, etc. Mann's catalog gives all details.

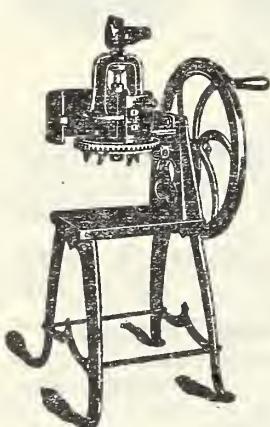


## Mann's No. 7

The New No. 7 is mounted on a strong iron stand, and has patent automatic governing spring feed. Large, open-hinged cylinder, giving instant access to all working parts, has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (See cut.)

**Fresh Cut  
BONE  
Is the  
FOOD  
that makes  
HENS LAY**

**Interesting .  
Booklet  
“BUGS and  
WORMS”  
FREE**



MANN'S NO. 9.

## Mann's No. 7½

**Adapted to run either by hand or power without any change.** The particular advantage of the 7 ½ is that while it is a complete power machine, it can be operated by hand just as easily as the No. 7. It is recommended even if you have no power at present, for should you get power in the near future, you need be at no further expense. It has all the improvements. It meets a long-felt want.

## Mann's No. 9

About the same as No. 7, except that it has a larger cylinder and greater holding capacity, different design and larger table.

## Mann's No. 11

The No. 11 is exactly the same as No. 9, with the power parts added. It has all the latest improvements. Capacity, 100 pounds per hour.

## Mann's No. 12—Power

Strictly a power machine, and full of business from top to toe. Capacity, 120 to 150 pounds per hour. Horsepower required, one to two. Just the machine for marketmen, extensive breeders, or any one who has large quantities of bone to cut.

## Price List of Mann's Bone Cutters

### New Styles

		Price	Wgt
No. 5C	(with crank handle).....	\$ 7.75	30
No. 5B	(with balance wheel).....	10.00	55
No. 5BM	(B. W. and iron stand).....	13.00	80
No. 7	(B. W. and iron stand).....	15.00	107
No. 7 ½	(hand or power).....	21.00	150 MANN NO. 7.
No. 9	(B. W. and iron stand).....	22.00	163
No. 11	(power machine).....	30.00	215
No. 12	(power machine).....	35.00	260
No. 15	(power machine).....	67.50	420

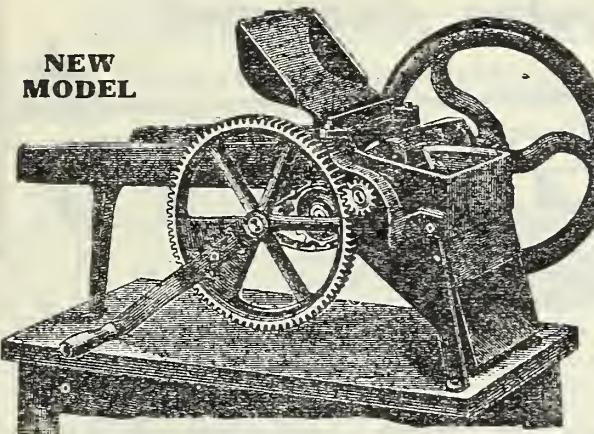
MANN'S NO. 11

## MANN'S HANDSOME 40-PAGE CATALOG

Is fully illustrated and tells all about the different style green bone cutters, clover cutters, corn shellers, grit smashers, etc., and contains much valuable information. Free on request.



## Wilson Dry Bone Mill No. 1



NEW MODEL

This is a practical mill, grinding all kinds of shell, crockery, grit, burnt or dry bone, feed, etc. Instantly adjusted to grind coarse or fine. Every poultry keeper should have one of these mills. You will find them very convenient and serviceable. Weight, 33 pounds. Diameter of hand wheel, 20 inches.

Price, \$5.00.

## Wilson Mill No. 0

A family grist mill in itself. Especially made for grinding flour, corn meal, spices, coffee, etc., for table use. It can also be adjusted for cracking grain. Capacity and size same as No. 1; hopper round. Weight, 30 pounds.

Price, \$5.00.

## "New Model" Clover Cutter

The "New Model" Clover Cutter is designed for cutting, either green or dry, such growths as clover, alfalfa, vegetable tops, etc., into  $\frac{1}{8}$ -inch lengths. These growths are the cheapest and most productive egg-forming poultry foods for cold weather.

The feature that gives the "New Model" easy supremacy over similar machines is the cutting mechanism. The machine can be kept in perfect order at all times, because the cutter bar is adjustable and easily accessible, and the four 7-inch spiral steel knives can readily be removed for sharpening. Those who are familiar with "ordinary" cutter construction will appreciate these improvements.

The "New Model" is made only of iron and steel, from entirely new patterns, it is a strong feeder, has large capacity, runs unusually easy and will do perfect work indefinitely. Length over all, 28  $\frac{1}{2}$  inches.

The machine is intended to be mounted on a box or bench at any height to suit the operator. Weight, 60 pounds.

Price, \$10.50.

## Bond's Grit Machine

Will break rock, limestone, ore, crockery, glass, dry clam and oyster shells, etc. A boy of seven can work it. Drop the material in the top and work lever up and down quickly, but not with great pressure. Do not use green bone or wet oyster shells, but dry them. Weight, 25 pounds.

Price, \$4.00.

## Mann's Corn Sheller

Best low-priced corn sheller made. A profitable tool if you have corn to shell.

Price, \$3.00.

## Mann's Clover Cutter

Made entirely of iron and steel; cannot warp or shrink. It cuts any kind of hay or clover, either dry or green, and more rapidly than any other make. Each revolution of the balance wheel produces twelve cuts. Do not buy a clover cutter until you have seen Mann's.

Price, \$10.50; mounted on iron stand, \$12.00.



Wilson's Mill No. 1

## Mann's Cast Iron Mortar

For breaking glass, crockeryware, oyster shells or other dry substances for poultry. Weight, 33 pounds; height, 12 inches; 9 inches square; pestle 4 feet long.

Price, \$3.50.

## Wire Netting for Poultry Runs, Trellises, Etc.

No. 20 Wire, in rolls 150 feet long, in the following widths:

	12-in.	18-in.	24-in.	30-in.	36-in.	48-in.	60-in.	72-in.
2-inch mesh.....	\$0.75	\$1.05	\$1.35	\$1.75	\$2.00	\$2.75	\$3.40	\$4.00
1-inch mesh.....	1.65	2.50	3.30	4.15	4.95	6.60	8.40	9.90

Short lengths, 2-inch mesh, 1c sq. ft.; 1-inch mesh, 3c. Prices subject to change without notice.

## "Union Lock" Netting

**Union Lock "Square Mesh" Poultry Netting.**—Made of two strands of No. 20 wire run horizontally with No. 19 steel wire vertical strips every three inches, the first seven cables 1  $\frac{1}{4}$  inches apart; the next six are two inches, and all above are four inches. This makes the fence tight at the bottom, where needed for small chicks. This fence will fit any unevenness of ground, and because of its strength and construction requires no top or bottom rail and only half as many posts as ordinary wire netting.

### Price, Per Roll.

12-inch, 165 feet to the roll.....	\$1.70	48-inch, 165 feet to the roll.....	\$4.20
18-inch, 165 feet to the roll .....	2.25	60-inch, 165 feet to the roll.....	4.80
24-inch, 165 feet to the roll.....	2.85	72-inch, 165 feet to the roll.....	5.50
36-inch, 165 feet to the roll.....	3.50	Galvanized Staples, per lb.,.....	10c



## Miscellaneous Poultry Supplies—Continued



PORTLAND SEED CO. PORTLAND, OREGON

Kant-Krack Egg Box is specially designed for the safe delivery of valuable eggs for hatching and is a great favorite with poultrymen.

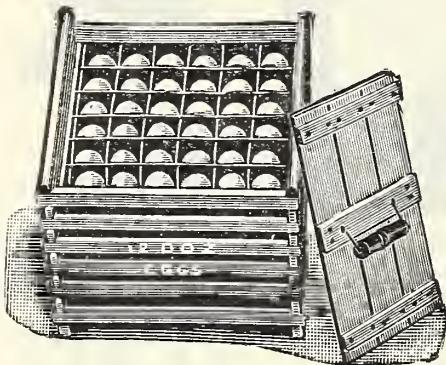
**Made of heavy corrugated paper.** Only a few second's work to set the box up, pack it with eggs, and address it. These boxes are light but very strong, being firmly braced, and will stand the weight of several hundred pounds without crushing.

No.	Size	Weight Each	Six	Dozen
3	15-Egg	1 lb.	\$0.15	0.80
4	30-Egg	1 1/2 lb.	.25	1.25
5	50-Egg	2 lb.	.40	2.00

### Ideal Paper Egg Boxes

Intended for use in delivering eggs to private families. If you have a "select" egg trade, you should use this box. Nicely printed with a blank space for your name and address. Printed to order in two M. lots at no extra charge. They ship "knocked down" at very low rates. Weight 12 lbs. per 100.

**Prices:** 1-dozen size, 20c dozen; \$1.00 per 100; \$9.00 per 1000. Sample box by mail, 5c.



The "Humpty Dumpty"

### Collapsible Poultry Coops

These are the neatest, lightest and strongest coops for shipping poultry that we have ever seen. They are well made, and will last for years. Easily cleaned and stored. They are up-to-date coops, and make a good impression. They are a mighty good investment for any poultry raiser. Coops are made in three sizes. All treated with oil. Order a sample coop.

**No. 1 Coop.** For 12 to 24 chickens, size 36x24x12, weight, 23 pounds

**Price, \$2.00**

**No. 2 Coop.** For 24 to 36 chickens, size 48x30x12, weight, 33 pounds

**Price, \$2.25.**

**No. 3 Coop.** For turkeys and geese; will carry 250 pounds of weight  
Size 48x30x16.

**Price, \$2.30.**

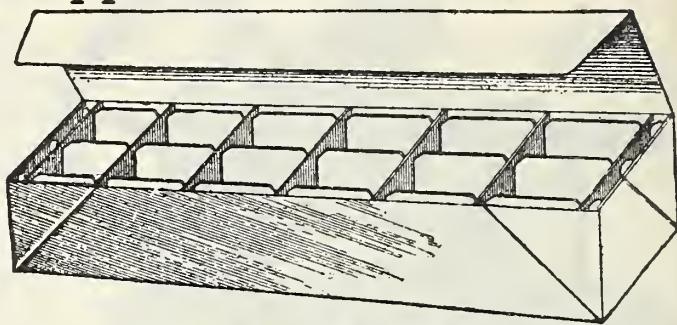
### Hydro Safety Lamps

**Oakes.**— Made especially for incubators and brooders; has a water jacket and is perfectly safe.

**No. 1 — Small Size, 3/4-inch wick,** weight  $\frac{3}{4}$  lb.  
**Each, \$1.00.**

**No. 2 — Medium size, 1-inch wick,** weight 1 lb.  
**Each, \$1.50.**

**No. 3 — Large size, 1 1/2-inch wick,** weight 1  $\frac{1}{4}$  lbs.  
**Each, \$1.75.**



### Suwanee Egg Carton

#### Saves Breakage, Folds Flat

When filled fits into a regular egg case, 3 dozen in a layer.

**Every man in the egg trade should use the Suwanee Egg Carton.**

A light, but strong carton, holding one dozen eggs, and **built to fit a regular egg-packer.** Throw away your "fillers." Use this carton; packs three to a layer in an ordinary egg case, and is always ready for delivery. **Saves handling — saves breakage.** Built with double walls. Ask for sample. Weight with fillers, 3 ozs. each. **Price, per doz., 25c; per 100, \$1.25; per 1000, \$10.00.**

**ADVERTISE YOUR EGGS.**— In lots of 10,000 cartons we will print your name or any announcement you want to make, at the rate of 50c per 1000.

### P. S. Co.'s Shipping Coops.

All wood, neat, very light, but strong. Poultry raisers selling poultry at fancy prices should always use these coops. Weight Nailed K. D.

**No. 1.** 10x21x18 10 1/2 lbs. Each, 35c; 6, \$1.90.

**No. 2.** 10x24x20 11 1/2 lbs. Each, 50c; 6, 2.75.

**No. 3.** 20x24x20 18 1/2 lbs. Each, 60c; 6, 3.35.

### "Humpty Dumpty"

The best, the cheapest, the most convenient **EGG CARRIER.** The "Humpty Dumpty" is light but strong, being almost indestructible. Can be folded flat for shipping empty. The most satisfactory egg carrier. Holds 12 dozen. Weight with fillers, 7 lbs.

**Price: Each, 50c; per 6, \$2.90; doz., \$5.50.**

### Egg Cases

30-dozen case with pasteboard fillers.....	\$0.40
Pasteboard fillers for 30-dozen case. Weight, 3 lbs.....	.20
Pasteboard fillers, per case (for 12 30-dozen cases).....	1.80



COOP COLLAPSED



COOP SET UP

### Caponizing Instruments

The demand for capons exceeds the supply, the price per pound averaging more than twice as much as that paid for ordinary roosters.

**P. S. CO.'s STANDARD,** the best low priced set.

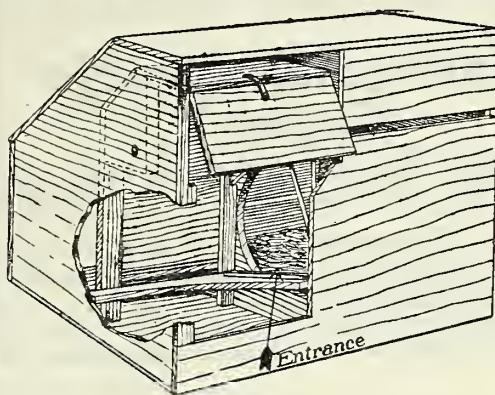
**Price, postpaid, \$2.00.**

**WIGMORE,** a first-class outfit with book of instructions.

**Price, postpaid, \$2.50.**



FULL DETAILS OF THE MANY ADVANTAGES OF THE LEE INCUBATORS AND BROODERS ARE GIVEN IN THE LEE BOOKLET. SENT FREE ON REQUEST

POINTS OUT  
THE DRONES**The Success Automatic****Combined, Designating, Laying, Hatching and Trap Nest**

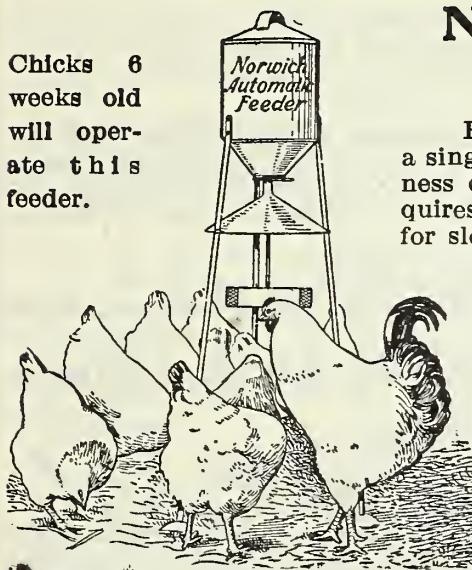
Every poultryman knows the value of a Trap Nest. The trouble has been to get a satisfactory one. We offer the "Success" and will welcome your criticisms and inquiries. Descriptive pamphlet on request.

The "Success" Trap Nest automatically separates the laying hens from the non-producers. Works without attention or care from you. Shows "Who's who" in your hen yard and you do not have to watch the hen. She releases herself. No other trap nest gives this advantage.

By the simple turn of a Screw Hook the "Success" can be converted into a regular trap nest that will hold the hen until released.

For setting hens, the Success Nest is the perfect one, as it cannot be occupied by more than one hen at a time. Prices: No. 2 — Two nests, \$3.50; No. 3 — Three nests, \$5.00; No. 4 — Four nests, \$6.50.

Chicks 6 weeks old will operate this feeder.

**Norwich Automatic Exerciser and Feeder**

Every kernel of grain put into this feeder will go to your flock, not a single one will be wasted. Absolutely bird and rat proof. Rain or dampness cannot effect it. Saves its cost in 90 days by preventing waste, requires no attention except filling of hopper when empty. Adjustable for slow or fast feeding.

This is the most successful and practical automatic feeder ever invented; the slightest "peck" on the bait bar scattering the grain in the litter in a wide circle where all the fowls have ample opportunity to "scratch for it," affording just the right amount of exercise. **Keeps them busy all the time.**

Guaranteed to improve the flock, increase the egg production and save feed. Descriptive pamphlet on request.

**MADE OF HEAVY GALVANIZED IRON.**

	Each
No. 1 — 8 quarts.	\$3.00
No. 2 — 14 quarts.	3.75
No. 3 — 20 quarts.	4.75

**Breeders Magic Egg Tester****The Manufacturers Challenge —**

Any person in the world to hatch one egg the Magic Egg Tester registered unhatchable before incubation. No light. No electricity. No expense and lasts a life-time. Demonstrated at Poultry Shows everywhere. Sold by dealers and agents in every country on the globe. This simple, but wonderful instrument, **shows the best and strongest hatchable eggs before incubation.** Selects the eggs which will absorb heat and moisture alike; rejects the inferior ones, and shows correct moisture throughout the hatch.

**Don't set another egg until you have a Breeders' Magic Egg Tester. Price, Each, \$2.00**

**EGG BOXES FOR PARCEL POST**

**The Boxes offered below are Substantial, Light, Safe and Serviceable**  
**They pack flat for returning empty**

This shipping package is so constructed that each egg is separated by a thickness of corrugated board and the entire contents are surrounded by a double wall of air-cushioned corrugated board. Absolute protection is therefore assured, as the box possesses sufficient strength and durability to stand the usual rough handling in transit. Their extreme light weight, when compared with other packages, will in many cases, save the postage for an extra pound. Fold flat for shipment.

For shipment in Zones each egg must be wrapped in cotton, excelsior, newspapers, tissue paper or material of similar nature when shipped in these boxes, and box so wrapped that nothing can escape from the package. Any commercial wrapping paper is acceptable.

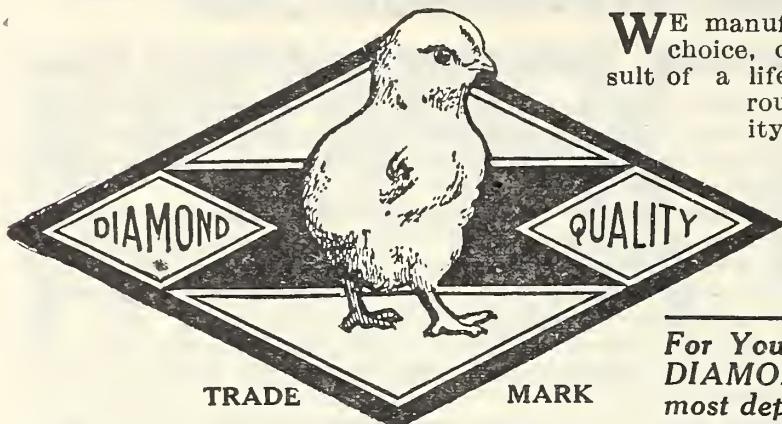
**PRICES**

Size	Packed	Per Doz.	Per 100	Wt. Per 100
1 doz. 7 5/8x5 5/8x2 5/8	2 doz. per bdl.....	\$ .75	\$ 5.00	40 lbs.
2 doz. 7 5/8x5 5/8x5 1/4	2 doz. per bdl.....	1.10	7.50	78 lbs.
3 doz. 7 5/8x5 5/8x8	2 doz. per bdl.....	1.65	12.50	104 lbs.
5 doz. 9 1/2x7 5/8x8	1 doz. per bdl.....	2.15	16.00	158 lbs.

**For Mailing Boxes of all kinds and sizes write for our FREE booklet, "Parcel Post Packages"**



## Portland Seed Co.'s "Diamond Quality" Poultry Foods



WE manufacture our **Diamond Poultry Foods** from choice, clean, wholesome material, and they are the result of a lifetime of careful study and experiments by a thoroughly practical expert, who is a recognized authority on feeding.

### Diamond Chick Food

A Properly Balanced Ration that will make chicks grow and keep them healthy

For Young Turkeys, Pheasants and all young fowls **DIAMOND CHICK FOOD** is unexcelled. The safest most dependable and satisfactory food.

 Our trade mark on every original package is your protection. Demand it of your dealer, as there are many dangerous substitutes.

### The Making of Diamond Chick Food

The select grains that are used in the preparation of Diamond Chick Food are cut by a special process screened to a uniform size and run through a Fanning Mill to remove the dust and meal, which is the fatal element in most Chick Foods. After this process the ingredients are carefully weighed and mixed in correct proportions. No guess work.

By using Diamond Chick Food you are giving the chicks just what Nature Intended they should have, a food composed of grains (cracked), small seeds, bone, dried sweet meat (to take the place of insects and bugs), charcoal, etc., mixed in the right proportions to produce a quick and profitable growth without loss. It's so convenient, so handy, always ready for use, and you can raise so many more chicks by feeding it that it is the **cheapest food you can buy**. A trial is all we ask.

Ask for descriptive pamphlet—Directions for feeding in each sack or package.

Price: 5 lbs., 25c; 12 lbs., 50c; 25 lbs., 90c; 50 lbs., \$1.60; 100 lbs., \$3.00

### Portland Seed Co.'s Diamond Egg Food or Laying Mash

Makes hens lay when eggs are high; keeps poultry healthy. Un-equalled for feeding young chicks.

A complete ground food to be fed dry or wet. Starts hens laying and keeps them at it. Hastens moulting. Puts poultry in prime condition. Makes young fowls grow fast. **No Drugs—No Stimulants**—but a rich, wholesome, nourishing food for growing fowls and hens, encouraging rapid growth and increasing egg production. Can be fed dry or as a mash. And is the most successful combination of egg producing elements. Put up in 100 lb., Bags. Full Weight.

Price: per lb., 3c; per 100-lb. sk., \$2.10.

### Diamond Scratch Food

The most successful "up-to-now" ready-mixed complete food. Makes hens sing, and singing hens lay. A perfect "working ration" for fowls. Grains, Beef, Bone and Charcoal carefully prepared in the correct proportion; a veritable "hen's" delight, and a great egg-producer.

Price, per lb., 3c; per 100 lbs., \$2.15.

### High Grade Meat Scraps

**Diamond Brand, Special.** A new meat product, perfectly prepared, fine ground and clean. The highest feeding value yet produced.

Price: 4 lbs., 25c; 50 lbs., \$2.25; 100 lbs., \$4.00.

**STEEL CUT**, granulated, clean and free from dust, hide, hair, etc. There is no waste; can be fed like grain if preferred. Every poultry keeper knows the value of this food.

Price: 5 lbs., 25c; 50 lbs., \$2.00; 100 lbs., \$3.75.

### Fish Scrap

**Made from sweet, clean Halibut.** A high grade poultry food, rich in protein (65%) relished by fowls — furnishing a clean, healthy meat ration. No chemicals or acids used in its manufacture, and it is free from meal and dust.

Price, per lb., 5c; 100 lbs., \$3.50.

### BOOKS ON POULTRY PAGE 55



Look for the trade mark—be sure it's "Diamond"

### Diamond Growing Food

Our special formula for promoting a rapid, healthy growth and should be fed after the third or fourth week; nothing else needed; will quickly produce large, plump "Broilers."

Price, per lb., 3c; 100 lbs., \$2.70.

### Diamond Pigeon Food

This special combination for pigeons is unequalled for squab raising, feeding for exhibition or as a regular working ration.

Price, per lb., 3c; 100 lbs., \$2.70.

### Fish Meal

A fine ground, pure, sweet fish meal, containing 65% protein — feed as you would meat meal; a rich, wholesome food for poultry.

Price, per lb., 5c; 100 lbs., \$3.50.

 Prices subject to Change without Notice—no Premiums allowed on Poultry Foods



## Portland Seed Co.'s Diamond Poultry Foods—Con'd.

### HIGH GRADE MEAT MEAL.

A highly concentrated food. Being cooked meat, dried and ground. Very rich in protein. It should be mixed with the soft food. No hides or tankage in our meat meal, but, as its name implies, meat, cooked, dried and ground; unexcelled for egg-production.

### DIAMOND GRADE.

1 lb., 10c; 10 lbs., 50c; 100 lbs., \$4.00.

**STANDARD.**—Good grade.....100 lbs., \$2.50.

### GRIT.

Every poultry raiser should keep a supply of grit in each pen. Made in two sizes, chick and hen size. We always send hen size unless otherwise ordered.

### DIAMOND CRYSTAL.

Price: 5 lbs., 10c; 100 lbs., \$1.00.

**Mineral Grit.**—Containing necessary minerals.

Price: 5 lbs., 10c; 100 lbs., 90c.

### CHARCOAL.

Our Charcoal is guaranteed, prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion; a health preserver.

Prices: 1 lb., 10c; 10 lbs., 50c; 100 lbs., \$3.50.

### GRANULATED BONE.

Our "Diamond Brand" is made from selected hard, white, raw bones, and of a superior quality; an indispensable food for laying hens.

**DIAMOND.** Price: 10 lbs., 30c; 100 lbs., \$2.75.

**STANDARD.** Price: 100 lbs., \$2.35.

### BLOOD MEAL.

The most highly concentrated egg-producer on the market. To be fed in soft food. Unexcelled as a food for forcing growth of chicks or as an egg food.

**DIAMOND.**—Price: 1 lb., 10c; 10 lbs., 50c; 50 lbs., \$2.00; 100 lbs., \$3.75.

## Diamond Poultry Remedies

These are manufactured exclusively by us and we fully guarantee them.

**DIAMOND POUlTRY DIP.**—Certain eradicator of insects and disease on all animals. Insures healthy conditions. A general disinfectant and cleanser. Kills cockroaches, water bugs, ants and all insects. Cures gapes, bumble foot, chicken pox, scaly legs, etc. Keeps your yards and houses sanitary. **One gallon makes 100 gallons.**

Prices: Qts. 50c; doz., \$5.00; Half Gal., 85c; Gal., \$1.50; doz., \$14.50. Mailing wts., qt., 3 lbs;  $\frac{1}{2}$  gal., 5 lbs; Gal., 10 lbs.

**DIAMOND MICROZONE.**—Will cure Roup, Cholera, Swelled Head, Sore Eyes, and most all Chicken Diseases. Every poultry keeper should have a bottle of this on hand. Liquid, cannot be mailed. Wt., pk'd 3 lbs. Price, per bottle, 50c.

## Diamond Chick Food and "Mandy Lee"

June 16, 1914.

Gentlemen:-

I am using your Diamond Chick Food for a band of baby chicks and have raised a lot of 49 out of 50 on it (accidently killed one) and I am pleased with the results.

Mrs. Desire Gannard.

Gentlemen:-

The Mandy Lee is certainly a good hatcher. I just took off some of the dandiest chicks I ever saw, so large and heavy and look like some a week old.

I have some six weeks old that are fully feathered and most of fifty weigh one pound and over.

Mrs. H. V. Rominger.

### OYSTER SHELLS, CRUSHED.

We offer nice clean stock, free from dust and waste. These should be within reach of your hens at all times. In two sizes, coarse and fine.

**DIAMOND.** Price: 5 lbs., 10c; 100 lbs., \$1.25.

**STANDARD POULTRY SHELL.**—A very good grade of mixed sea shell — sold by some dealers as oyster shell — but is not so good and has more waste. 80c per 100 lbs.

**CLAM SHELL.** Choice. 5 lbs: 10c; 100 lbs. 90c

### BIRD SEED.

Not for planting. Special Prices in Quantity.

P. S. Co.'s Best Mixed...	Per lb., postpaid, 20c.
Canary, best re-cleaned	Per lb., postpaid, 20c.
Hemp .....	Per lb., postpaid, 20c.
Millet .....	Per lb., postpaid, 20c.
Rape .....	Per lb., postpaid, 20c.
Cuttle Bone, large bone .....	Postpaid, 2 for 5c.

### TOBACCO DUST.

For use in dust baths and nests. A cheap and effective exterminator of lice.

Price: 1 lb., 10c; postpaid, 25c; 100, \$5.75.

### ALFALFA MEAL.

The best substitute for green food for Winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts.

Price: 1 lb., 5c; 10 lbs., 30c; 100 lbs., \$1.35.

### ALFALFA LEAVES AND BLOSSOMS

Price: 1 lb., 5c; 10 lbs., 30c; 100 lbs., \$2.00.

### POULTRY PEPPER.

A good tonic and invigorator; ground.

Price: 1 lb., 25c; 5 lbs., \$1.00.

## Lambert's Lice Remedies

**DEATH TO LICE.**—Five oz., 10c; 15 oz., 25c; 48 oz., 50c; 100 oz., \$1.00.

**DEATH TO LICE — SPECIAL.**—Dissolve in kerosene. 4 oz., 10c; 16 oz., 25c.

**DEATH TO LICE OINTMENT.**—For lice on chicks, scaly shanks on fowls of any kind. 1 oz., 10c, postpaid; 3 oz., 25c, postpaid.

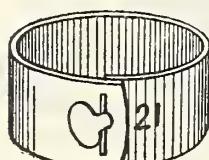
March 21, 1914.



## Miscellaneous Poultry Supplies

### Leg Bands For Poultry and Pigeons (See Cuts)

Every chicken must have a leg band on before it can be entered in a poultry show. In ordering Leg Bands, be sure to state size wanted, or breed of fowls bands are to be used on, and number wanted for males or females.



ECLIPSE



DOUBLE CLINCH



SMITH SEALED



LEADER BAND

**DOUBLE CLINCH.**—A new band, very safe; no exposed corners, ends or loops; has double fasteners.

**Prices, postpaid, 12 for 15c; 25 for 30c; 50 for 50c; 100 for 75c.**

**SMITH SEALED.**—Of aluminum and so constructed that by simply crushing a soft rivet they are sealed on the bird's leg, and must be destroyed to be removed. See cut.

**Prices, postpaid, 12 for 25c; 25 for 50c; 60 for \$1.00; 100 for \$1.25.**

**PIGEON BANDS.**—We can supply the Double Clinch and Open Band—you simply clasp it on—at price of Double Clinch.

**SMITH SEALED—Pigeon—Doz., 30c; 100, \$1.50.**



**Colored "LEADER" Leg Band.**—Adjustable, will fit any fowl, the colors are of celluloid in metal protecting band. White, Pink, Red, Blue, Yellow, Green and Brown. Can be furnished numbered 1 to 100 with the words, First, Second, Third, Fourth or Champion.

**Price, 12, .35; 25, .60; 50, \$1.10; 100, \$2.00; 250, \$4.50; 500, 8.50; 1000, 16.50.**

### Smith Sealing Tool.

Made especially for sealing the Smith leg bands. Plain Jaw, 50c; lettered Jaw, any letter, 75c, postage 10c.

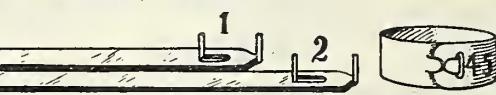
### Reliable Poultry Marker.

For marking the web between the toes. One of the best and handiest markers. Postpaid, 35c.

### Poultry Killing Knife.

French, best and most popular.

**Price, postpaid, 50c.**

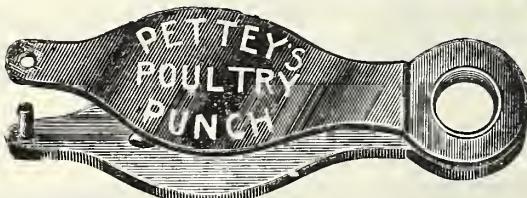


DOUBLE CLINCH LEG BANDS PIGEON SIZES

### Petty's Poultry Punch

Latest, most convenient Poultry Punch; can be put on a key ring or used for a watch charm. Will not clog. Thoroughly practical.

**Price, postpaid, 25c.**



## THERMOMETERS

### For Incubators--Tested.

Fig. 8.—Cornell Style.....	\$1.00
Fig. 6.—P. S. Co.'s triangle shape; metal back.....	.75
Fig. 10.—P. S. Co.'s Straight Metal back...	.60
Fig. 14.—Triangle shape; best incubator Thermometer made. Certified correct; worth the additional cost.....	1.00
Mandy Lee style.....	.75

### For Brooders.

Fig. 12.—Peep O'Day.....	\$0.65
Fig. 2.—P. S. Co.'s; for any style brooder...	.50
Mandy Lee style.....	.60

### For General Use

Cabinet.—8-inch wood back, nice finish....	.40
Fig. 4.—Household, 7-inch, black enamel, tin case.....	.25

**Fig. 1.—P. S. Co.'s Self-Registering**—A necessity for Greenhouse and Poultrymen. Will accurately register the extremes of heat and cold.

**Price, postpaid, securely packed, \$4.00.**

**Fig. 3.—Hotbed Thermometer**, for plunging in the bed to know when the temperature is right for planting. This knowledge may save much loss and delay.

**Each, postpaid, \$2.00.**

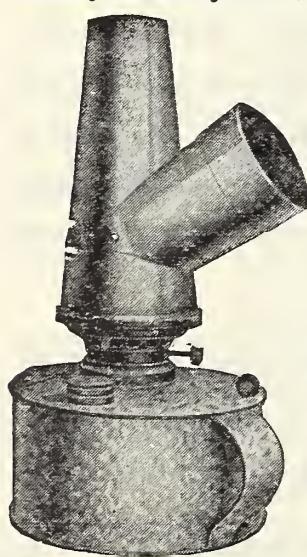
### The Wilder Illuminated Thermometer

Instantly indicates the temperature without opening doors. So simple that a child can attach it to incubator.

Everyone who owns an incubator knows how hard it is to read the thermometer correctly through the glass doors, and it is not always advisable to open them. But with the "Wilder" you simply press the button and the temperature is plainly indicated. Where several incubators are running, wires can be so placed that a single battery is carried and plug inserted for readings. Batteries and parts can be replaced at small cost if broken or exhausted. Wilder thermometers are absolutely dependable and are fully guaranteed. **Price each \$2.75.**

### Mandy Lee Egg Tester

This Egg Tester is made to use on a lamp and will fit the ordinary No. 2 burner. The same tester is furnished with all Lee Incubators. **Price, 50c postpaid.**



Mandy Lee Tester

## REMEDIES, LICE KILLERS, ETC.

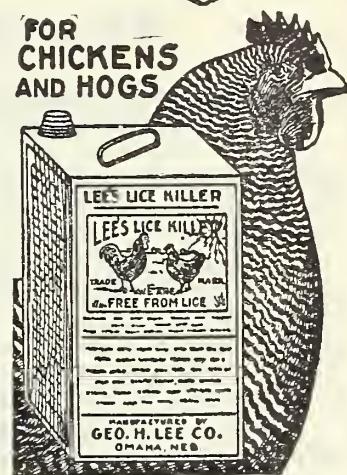
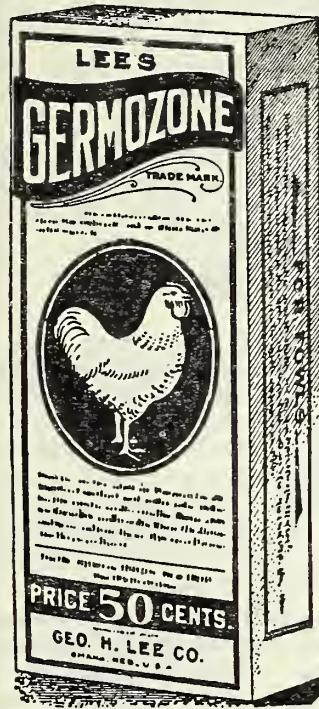
## Lee's Foods and Remedies for Stock and Poultry

THE GENUINE MERIT of the LEE FOODS and REMEDIES and their recognized superiority is their best guarantee, and you can depend upon them absolutely to do all that is claimed for them. The valuable booklets of the Lee Company are free to poultry-keepers, and contain reliable and complete information to date on poultry problems. We mail them on request.

## Lee's Lice Killer—For 18 Years the Standard

**LIQUID.**—Destroys either by vapor or contact. No trouble to apply; just paint the roosts or wall at night. Rids poultry and houses of all vermin; is prepared exclusively for this purpose, and there is nothing just as good.

**PRICE:** qt., 35c;  $\frac{1}{2}$  gal., 60c; 1 gal., \$1.00;  
5 gal., \$4.00.



## GERMOZONE

—the biggest seller in poultry medicine on the market, and has value that cannot be determined in dollars and cents. Hot weather breeds cholera, bowel complaint, and numerous other diseases so common and fatal to chicks. Regular use of Germozone insures BETTER health; BETTER chicks; BETTER layers; and the RIGHT kind of BREEDERS.

Use it for Bowel Complaint in little chicks; for Cholera, Roup, and other diseases among the older fowls; and regularly TWICE-A-WEEK for ALL fowls. It prevents contagion, tones the system, and insures BETTER health for the entire flock.

## PRICES.

**Lee's Germozone.** Liquid. 12-oz. bottle ..... 50c  
**Lee's Germozone.** Tablets. Pkg., postpaid ..... 50c



If you have never used Germozone, get a package at once. It will prove the most profitable investment you have ever made and you will never again be without it.

**LEE'S EGG MAKER** is not a tonic nor a medicine, but a meat food of great value. It will make hens lay, chicks grow, and keep them all in a healthy, vigorous condition.

2-lb. pkg., 25c; 5-lb. pkg., 50c; 25-lb. pail, \$2.50.

**LEE'S HEADLICE OINTMENT.** For little chicks. Large box, 15c.

**LEE'S INSECT DESTROYER.**—(Powder) 1 lb. can, 25c.

**LEE'S WHITE DIARRHOEA REMEDY.**—The best medicine for this dangerous disease of little chicks. Wt., 2 lbs; 12-oz. bottle, 50c.

**LEE'S HOG REMEDY** cures all diseases of hogs and keeps them healthy. Pkg., 75c; 25-lb. pail, \$2.00.

**LEE'S WORM POWDER** for horses, cattle, sheep and hogs. Safe and sure in result. Pkg., 25c, weight, 1  $\frac{1}{4}$  lbs.

**LEE'S MIXED STOCK SALT.**—Every breeder should have a supply of this salt. 25-lb. sack, \$1.25; 100 lbs., \$4.00.

## LEE'S BEST CONDITIONER STOCK FOOD.

—Promotes good health, digestion and assimilation. 25c pkgs., wt., 3 lbs.; 50c pkgs., wt., 8 lbs.; 25-lb. pails, \$2.50.

**LEE'S CARBOLIC SHEEP DIP.**—For lice, ticks, mange, itch or scab, on cattle, sheep and hogs. Qt., 50c;  $\frac{1}{2}$ -gal., 75c; gal., \$1.25; 5 gals., \$5.00. Mailing wts., qt. 3 lbs.;  $\frac{1}{2}$  gal., 5 lbs.

**LEE'S PEERLESS GOPHER KILLER.**—For killing gophers, squirrels, etc. Sure death. Quart can, wt., 3 lbs., 75c.

## LEE'S PEERLESS BUG KILLER.

Wt., pk'd., 2 lbs; 12-oz. bottle, 25c.

**LEE'S HICKORY SMOKE EXTRACT.**—Hickory Smoke Extract applied to meat preserves it indefinitely, imparting the delicious flavor that is only otherwise obtained by smoking with green hickory.

12-oz. bottle, wt., pk'd., 2 lbs., 35c; 32-oz. bottle, 75c.

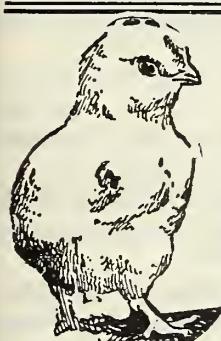
**LEE'S FLYO-CURO.**—We sell thousands of cans of this fly spray every season, and it gives good satisfaction. Qt., 35c;  $\frac{1}{2}$  gal., 60c; gal., \$1.00.

Mailing wts., qt., 3 lbs;  $\frac{1}{2}$  gal., 5 lbs; gal., 10 lbs.

## Thoroughbred Poultry and Eggs for Setting

Send us your orders for Poultry or Eggs, **any breed or strain**, and secure the advantage of expert, critical selection, that guarantees full value for your money. We do not depend on any one breeder, but can give you the pick of the prize-winning strains at right prices.

OUR SPECIAL POULTRY SUPPLY CATALOG lists everything necessary for the profitable production of poultry and contains valuable information on poultry diseases care and treatment. We want everyone interested in poultry to have this catalog and the "Mandy Lee" Books. Free.





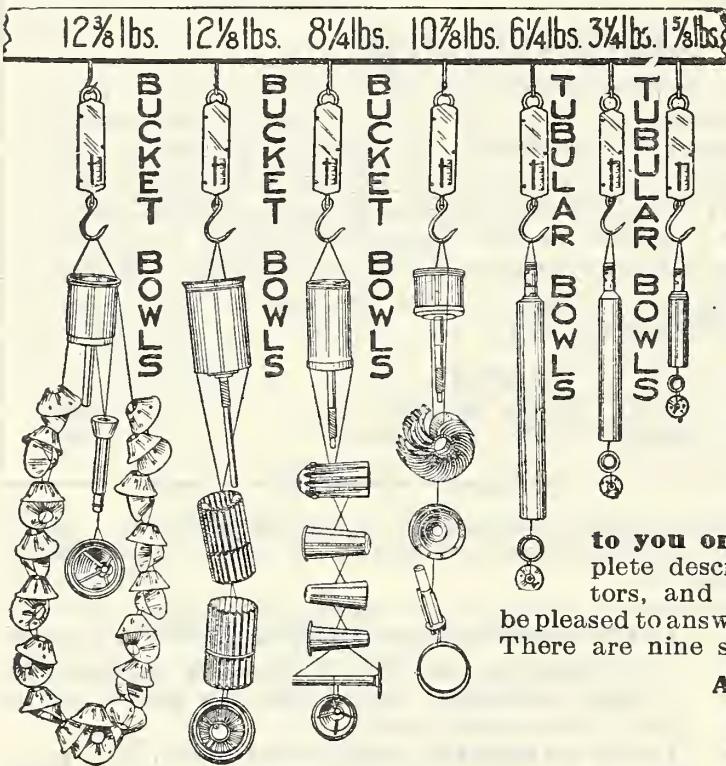
## The Sharples Cream Separator

For 34 years the standard. More Sharples Separators are in use today than all others combined.

If you milk a few cows you need a separator. If you milk many cows and do not use a separator, you are losing many times its cost.

The first cost of a Sharples Separator is not great and it quickly pays for itself in the finer separation of butter fat, saving much that is lost by hand skimming; also saves labor and trouble; no pans to set around, skim and care for, you simply pour the milk into the low receiver and a few turns will separate every particle of cream that can be saved.

If there is a single doubt in your mind as to which separator is the best for you to buy, compare the many intricate contrivances that make up the working parts of other separators with the few simple, smooth parts of the matchless "Tubular A."



See illustration.—compare the three sanitary parts of the Tubular to the multitude of germ and dirt collectors of the others. No other argument is necessary to convince any observing person of the superior merits of the Sharples.

What others attempt by complicated mechanical devices, the Sharples thoroughly and easily accomplishes with twice their skimming force by a process that is simple, powerful, irresistible in the perfection and beauty of its mechanical detail.

If your local dealer does not handle Sharples Separators, we will send the Sharples books to you on receipt of your address. They contain complete description, tell all about Tubular and Jersey separators, and contain much other interesting matter. We will be pleased to answer inquiries or demonstrate the Sharples in our store. There are nine sizes.

All prices are F. O. B. Portland, safely packed

No. 1—Tubular 225 lbs. per hour.....	\$40.00
No. 2—Tubular 300 lbs. per hour.....	55.00
No. 3—Tubular 400 lbs. per hour.....	65.00
No. 4—Tubular 500 lbs. per hour.....	75.00
No. 6—Tubular 700 lbs. per hour.....	90.00
No. 9—Tubular 950 lbs. per hour.....	110.00

No. 5—Turbine 500 lbs. per hour..... \$ 80.00  
 No. 7—Turbine 700 lbs. per hour..... 100.00  
 No. 10—Turbine 1000 lbs. per hour..... 125.00

## JERSEY SEPARATOR

An Improved Type of Disc Machine for Those Who Prefer a Low Priced Separator

If a cheaper separator than a "Tubular" will answer your purpose, investigate the "Jersey," which skims cleaner, runs easier, is simpler and lasts longer than any other separator—with the single exception of the "Tubular." Has bottom feed and single suspended bearing. The "Jersey" is guaranteed superior to any other separator of its class.

"JERSEY" No. 5,—500 lbs. per hour, price \$45.00; No. 9—900 lbs. per hour, \$75.00, F. O. B. Portland

## Babcock Tester---Model 8

For Testing Milk and Its Products.

The most accurate and best built tester. Case is one solid piece, weighing about 4 pounds. Crank and shaft a single solid piece of steel. Worm spindle and gear solid steel and iron mesh full width.

Buckets solid brass. Gear worm runs in oil. Model 8 Babcock Testers are guaranteed perfect in workmanship and material, all are equipped with full set of glassware, bottle of acid and brush. Shipping weight, 15 lbs. Accurate skim milk bottles at 60c each; \$6.00 dozen; postage 10c for single bottle.

### Prices Babcock Testers.

No. 4—2 bottles, milk only.....	\$4.25	No. 6—4 bottles, milk only.....	\$5.25
No. 5—2 bottles, milk and cream.....	4.75	No. 7—4 bottles, milk and cream.....	5.75

"TIPS FOR BUTTERMAKERS" is a splendid little book which we send FREE ON REQUEST.

## SHARPLES MECHANICAL MILKER

A practical and successful Milking Machine that does five times the work of human hands, more gently, more carefully and with better effect on the cow. Send for special catalog and let us know how many cows you are milking.

## Dairy Supplies, Stock Foods, etc.

### Dairy Thermometers

Floating Glass Dairy Thermometers, 8 inches, flat scale, easy to read, floats upright, range 150 degrees. **Each, 25c.**

### LACTOMETER

(Milk Per Cent scale, New York Board of Health Pattern.) 0 to 20; 2 degrees graduation. **Each, 50c.**

### LACTODENSIMETER (Quevenne)

Specific gravity scale, 1015 to 1040, 1 degree graduations. **Each, 50c.**

**NOTE** — All glassware carefully packed for mailing,

### LACODENSIMETER (Quevenne) with thermometer

Specific gravity scale, 1015 to 1040, 1 degree graduations; with thermometer in top of stem, length, 13 inches. **Each, \$2.00.**

### GLASS JARS

Plain glass jars with foot and pour-out for use with sprayometers and hygrometers in testing.

10x2 inches..... **Each, 45c.**  
12x2 inches..... **Each, 50c.**

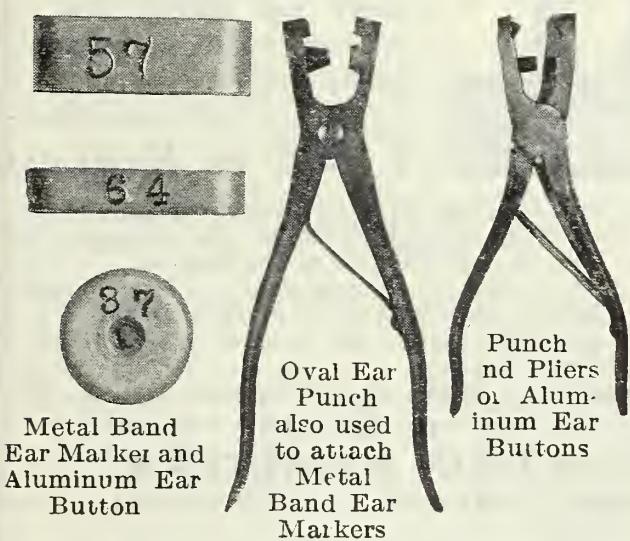
### GRADUATED CREAM GAUGE

Graduated 0 to 30 per cent.  $9\frac{1}{2} \times 1\frac{1}{2}$  inches. **75c**  
but we will not be responsible for breakage in transit.

### Markers For Cattle, Sheep and Hogs

Metal Ear Labels and Ideal Ear Buttons are satisfactory and easily applied marks of identification that are indispensable to breeders and stockmen.

Your name and address on one side, numbers on the other.



Not more than ten large letters can be used on the hog and sheep size; 15 large letters on cattle size, or 22 small ones.

PRICES	Two sizes; Sheep and Hog	Cattle
100 with name and number.....	\$1.65	\$2.15
50 with name and number.....	1.15	1.40
25 with name and number.....	.75	.85
100 with name only, or number only	1.25	1.65
50 with name only, or number only	.85	1.15
25 with name only, or number only	.60	.75

Wt. for mailing, Cattle size,  $2\frac{1}{2}$  lbs. per 100; Sheep size, 1 lb. per 100.

**OVAL EAR PUNCHES** Cattle Size, weight,  $1\frac{1}{4}$  lb. each, \$1.65; Sheep and Hog, size, \$1.25. Postage, 10c each.

### Ideal Ear Buttons Pure Aluminum Hardened

Medium size, suits all animals, clinches tight, can not come out; double strength. Name and address on top side; number on bottom, or number and name can both appear on one side if not more than 18 letters and figures; if more than 18, both sides can be used to the limit of 30 letters and figures.

Easily attached with special punch and pliers.

### PRICES

25.. Wt., 3 oz... \$1.25	500.Wt., 4 lbs. \$15.50
50.. Wt., $\frac{1}{4}$ lb... 1.90	1000.Wt., 6 lbs. 28.00
100.. Wt., $\frac{3}{4}$ lb... 3.50	

**Punch and Pliers** ..Wt., 1 lb..... \$1.25..

## International Stock and Poultry Foods, Remedies, Etc.

Every package of "INTERNATIONAL" is guaranteed to fulfill every claim made for it, or your money back for the asking. We sell "INTERNATIONAL" on its merits. You are the judge. Full directions on each package.

### For Poultry

#### INTERNATIONAL POULTRY FOOD.

Pkgs., 25c, wt., 2 lbs.; 50c, wt., 4 lbs.; and \$1.00, wt., 7 lbs.; 25-lb. pail, \$3.50.

#### INTERNATIONAL LOUSE KILLER.— Weight, 2 lbs.

Pkg., 25c.

#### INTERNATIONAL LICE PAINT.

35c cans, wt., 3 lbs; 60c cans, wt., 5 lbs.

#### INTERNATIONAL SCALY LEG OINTMENT.

Box, 25c, postpaid.

#### INTERNATIONAL CRESUL.

Wt., pk'd., 1 lb;  $\frac{1}{2}$ -pint can, 25c.

#### INTERNATIONAL ASEPTIN.

Per box, 25c, postpaid.

#### INTERNATIONAL ROUP CURE.

Per box, 50c, postpaid.

#### INTERNATIONAL RHEUMATISM OIL.

Per bottle, 25c.

#### INTERNATIONAL SUDAL.

Box, 25c, postpd.

#### INTERNATIONAL CHOLERA CURE.

Per bottle, 25c.

#### INTERNATIONAL WORM PILLS.

50c, postpd.

#### INTERNATIONAL BOWEL TROUBLE REMEDY.

Per box, 50c, postpaid.

### For Stock

#### INTERNATIONAL STOCK FOOD.

Pkg., 25c, wt., 2 lbs.; 50c, wt., 4 lbs.; 7-lb. pkg., \$1.00; 25-lb. pail, \$3.50.

#### INTERNATIONAL HEAVE CURE.— Weight, $1\frac{1}{4}$ lbs.

Pkg., 50c.

#### INTERNATIONAL GALL CURE.

Box, 25c; 50c, weight, 10 ozs.

#### INTERNATIONAL WORM POWDER.

Pkg., 50c, weight,  $1\frac{1}{4}$  lbs.

#### INTERNATIONAL PHENO-CHLORO.

25c wt., 1 lb; 50c wt., 2 lbs; \$1.00 cans, wt., 3 lbs.

#### INTERNATIONAL HARNESS DRESSING.

Price, 25c, weight, 2 lbs.; large can, 50c. weight, 3 lbs.

#### INTERNATIONAL HONEY TAR FOOT REMEDY.

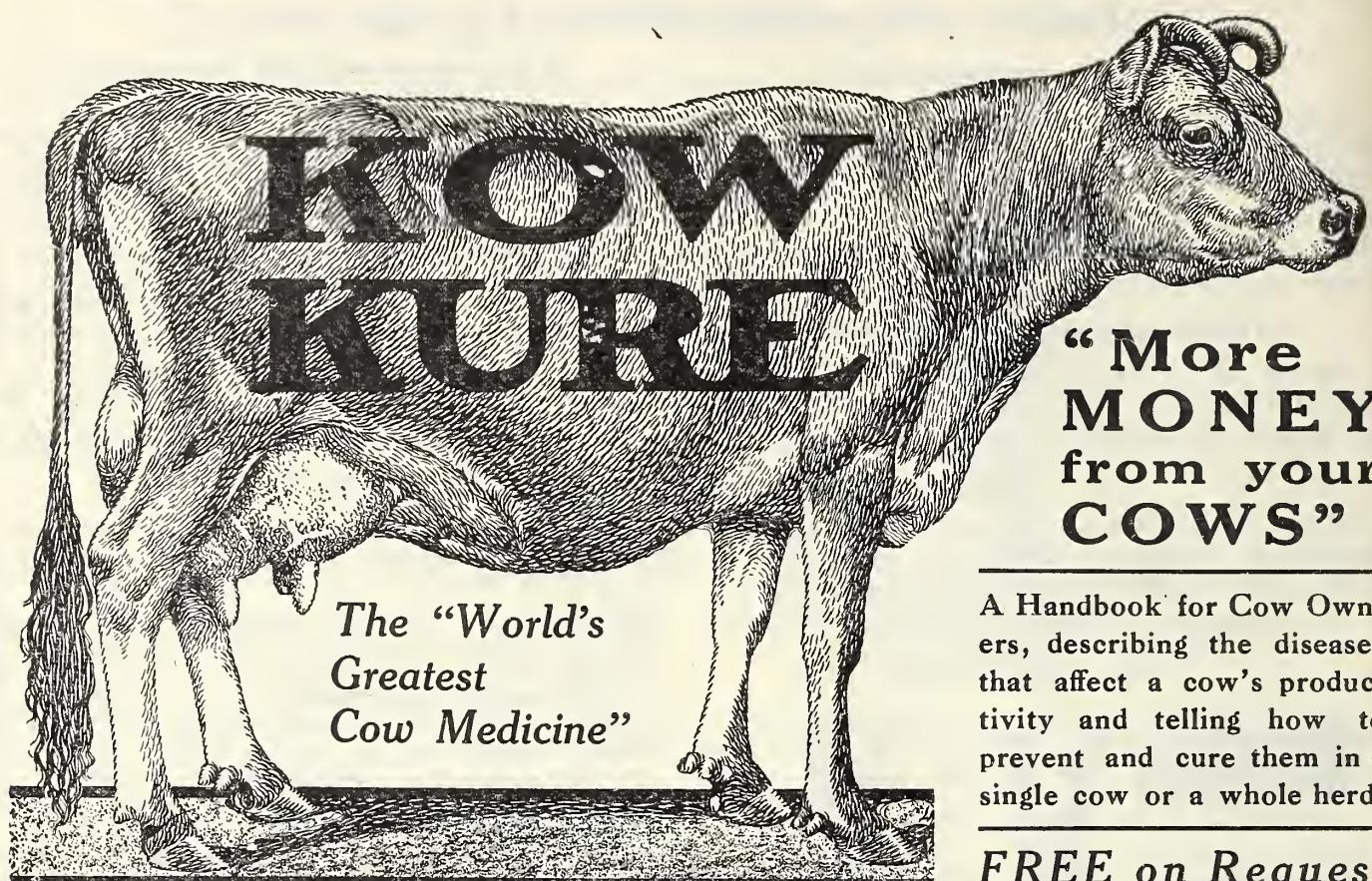
50c can, wt., 2 lbs; \$1.00 cans, wt., 3 lbs.

#### INTERNATIONAL COLIC CURE.

50c wt., 2 lbs; \$1.00 bottles, wt., 3 lbs.

#### INTERNATIONAL SILVER PINE OIL.

25c, 1 lb; 50c wt., 2 lbs; \$1.00 bottles, wt., 3 lbs.



**"More MONEY from your COWS"**

A Handbook for Cow Owners, describing the diseases that affect a cow's productivity and telling how to prevent and cure them in a single cow or a whole herd.

**FREE on Request**

KOW KURE is different from anything ever discovered for cow troubles. It is the only cow medicine that is strictly for cows only. It is not a stock food, but a specific remedy especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water, Swelling of the Bag, etc. It prevents abortion and removes retained after-birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. Makes poor cows good, good cows better, and makes more money for cow owners. It increases the milk flow, and enables the cows to produce strong, vigorous calves. It's the dairyman's gold mine, and a sure profit-payer.

Price, 50c, cans wt., 1 1/4 lbs., and \$1.00 cans, wt., 3 1/2 lb

### AMERICAN DAIRY ASSOCIATION REMEDIES

**BAG BALM.** A soothing, penetrating ointment for all affections of the bag.

50c packages, wt., 1/2 lb.

**GRANGE GARGET CURE.** An unsurpassed and positive cure.

50c cans, wt., 2 lbs.

**HORSE COMFORT.** For wire cuts and all flesh wounds.

25c bottles, wt. 1 lb., 50c bottles, wt. 2 lbs.

**AMERICAN HORSE TONIC.** A general improver for horses.

25c boxes, wt. 1 lb; 50c boxes, wt. 2 lbs.

Increases Milk Production 20%

### So-Bos-So

Protects Stock From the Torture of Flies



YOUR cows will give more milk---your horse do more work on less feed if protected by So-Bos-So at a cost of less than 1/2 cent a head per day.

Horses hitched or harnessed will stand quietly or work in comfort if protected by So-Bos-So and many runaways will be avoided. So-Bos-So is a boon to blacksmiths.

So-Bos-So is easily and quickly applied with a hand sprayer, cloth or sponge and is the only really efficient "fly bouncer" that we have ever seen.

*Be sure to look for the trade-mark as there are many preparations offered that will prove disappointing.*

**Price** So-Bos-So is sold in one gallon sealed tins only, weight 10 lbs., at \$1.25.





## BLATCHFORDS CALF MEAL

*A perfect Milk Substitute at  $\frac{1}{3}$  the cost—will push Calves and Colts ahead quicker than any other food.*

100 lbs. Makes 100 Gals. of Complete Milk Equal.

Blatchfords Calf Meal is a thoroughly steam cooked food for calves, to take the place of cows milk, contains all the elements of whole milk, yet costs less than skim milk. Calves and colts are healthier, hardier and grow faster when fed on Blatchfords calf meal. Ask for the Blatchfords booklet and learn how others made big profits raising calves on Blatchfords meal.

**PRICES:** 25 lbs., \$1.25; 50 lbs., \$2.25; 100 lbs., \$4.00.

## BLATCHFORDS PIG MEAL

**The Perfect Milk Substitute for Young Pigs**

At weaning time Blatchfords pig meal will safely carry the young pigs from the sow to the pasture and coarse feed, and there will be no runts, a pound of pig meal costing less than 5c makes a gallon of perfect milk equal. Keeps the pigs healthy and growing strong. Booklet and full information on Request. Prices, 25 lbs., \$1.25; 50 lbs., \$2.25; 100 lbs., \$4.00.

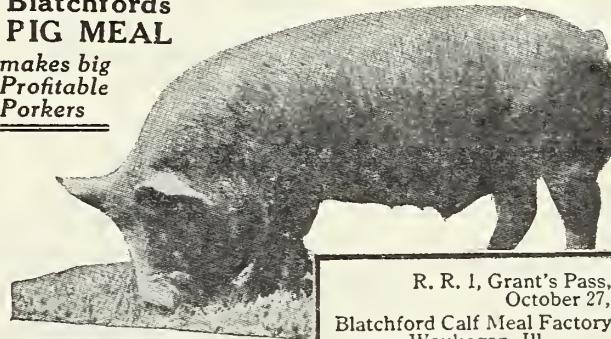
### BLATCHFORDS LAMB FOOD

Lambs demand a careful weaning, needing a milk diet for the change to ordinary food. Blatchfords Lamb Food is an ideal ration and imitation Ewes milk. Prices, 25 lbs., \$1.25; 50 lbs., \$2.25; 100 lbs., \$4.00.

### BLATCHFORDS MILK MASH

Baby chicks started on this imitation milk will grow and thrive rapidly and be free from bowel trouble. Contains no drugs. Prices, 25 lbs., \$1.25; 50 lbs., \$2.15; 100 lbs., \$3.90.

**Blatchfords  
PIG MEAL**  
makes big  
Profitable  
Porkers



R. R. 1, Grant's Pass, Ore.  
October 27, 1914.

Blatchford Calf Meal Factory,  
Waukegan, Ill.

Gentlemen:

I have been using your Pig Meal as a milk-substitute for young pigs and find it the best milk-substitute that we can buy. Royal Lee 25th, the Junior Champion boar of the 1914 Oregon State Fair, was fitted on Blatchford's Pig Meal.

(Signed) F. R. STEEL.

**ROYAL LEE 25th  
Jr. Champion Boar  
Oregon State Fair, 1914**

Raised on  
Blatchford's Pig  
Meal

## “MEDICO” Tonic and Worm Destroyer

*80% of all stock losses are due to worms—only healthy animals respond to feeding—  
wormy stock will not thrive—your money is fattening worms.*

**MEDICO DESTROYS** the dreaded intestine and stomach worms and expels them from the system, tones up the digestive tract and keeps them away. Horses, cattle, sheep, hogs, all must have salt, a package of Medico mixed with 70 lbs. of salt makes the most perfect medicated salt tonic and worm destroyer possible to obtain, and at a fraction of the cost of such preparations. Keep this salt before your stock, they will use the proper amount to keep them healthy.



*Be sure this Trade Mark is on  
the package.*

**Price, 5 lb. pkg.,** (mailing weight 6 lbs.,)  
\$1.25.



5 lb. pkg. to 70 lbs. salt

### Proteina (Soy Bean) Oil Meal

**46% Protein, 10% Fat.**

Contains **4 times the feeding value of grain.** A most valuable and satisfactory concentrated food for cows, calves, pigs, poultry and all farm animals; superior in every way to Linseed Oil Meal. Full information and descriptive literature on request.

**Price, 1 lb., 5c; 50 lbs., \$1.50; per 100, \$2.25.**

### Dried Beet Pulp

To be fed dry or moistened. Dry shredded sugar beets improved in feeding value by removal of the sugar. Fed half and half with other grains will greatly increase the milk flow. Highly recommended for dairy and show stock; a safe, economical food.

**Price, per lb., 3c; 50 lbs., 80c; 100 lbs., \$1.35;  
ton, \$26.00.**



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## CHANGE IN PRICES ON VEGETABLE SEEDS

Before the first pages of the vegetable section of this catalog were off the press an advance in many items was necessary on account of universal shortage. This makes the price in some copies of the catalog lower than others,

**The following list gives correct prices and will apply on the items listed, cancelling all others.**

<b>BEANS</b> —Dwarf:		Pkt.	Lb.	10 lbs.	<b>BEANS</b> —Climbing or Pole:		Pkt.	Lb.	10 lbs.	
Pencil Pod Black Wax . . . . .		10c	30c	\$2.50	Asparagus . . . . .		10c	30c	2.50	
Golden Wax—Improved . . . . .		10c	25c	2.25	London Horticultural . . . . .		10c	15c	1.25	
Golden Wax . . . . .		10c	25c	2.00	Kentucky Wonder . . . . .		10c	15c	1.25	
Davis Wax . . . . .		10c	30c	2.50	Lazy Wife . . . . .		10c	20c	1.50	
Wardwell's Kidney Wax . . . . .		10c	30c	2.50	Dutch Case Knife . . . . .		10c	15c	1.25	
Black Wax . . . . .		10c	25c	2.25	Scarlet Runner . . . . .		10c	25c	2.00	
Stringless Green Pod . . . . .		10c	30c	2.50	<b>BEETS</b> —Garden:	Pkt.	Oz.	M lb.	Lb.	
Extra Early Red Valentine . . . . .		10c	20c	1.75	P. S. Co.'s Market Garden . . . . .	5c	15c	35c	\$1.00	
Refugee or Thousand to One . . . . .		10c	35c	3.00	Detroit Dark Red Turnip . . . . .	5c	10c	35c	1.00	
White Navy . . . . .		10c	15c	1.25	Extra Early Egyptian . . . . .	5c	10c	35c	1.00	
Canadian Wonder . . . . .		10c	25c	2.00	Early Eclipse . . . . .	5c	10c	35c	1.00	
Dwarf Horticultural or Cranberry . . . . .		10c	25c	2.00	Early Blood Turnip . . . . .	5c	10c	35c	1.00	
Lady Washington . . . . .		10c	15c	1.25	Long Smooth Blood . . . . .	5c	10c	30c	.90	
Broad Windsor . . . . .		10c	15c	1.25	Half Long Blood . . . . .	5c	10c	30c	.90	
<b>BEETS</b> —Mangels:		Pkt.	Oz.	1/4 lb.	Lb.	5 lbs.	10 lbs.	Oz.	1/4 lb.	Lb.
Danish Sludstrup . . . . .		5c	10c	20c	French White Sugar . . . . .	5c	10c	...	\$0.45	
Danish Red Giant Eckendorf . . . . .		5c	10c	20c	Lane's Imperial Sugar . . . . .	5c	10c	...	.45	
Improved Danish Intermediate . . . . .		5c	10c	20c	Klein Wanzleben . . . . .	5c	10c	15c	.45	
Golden Tankard . . . . .		5c	10c	15c	Improved Short White . . . . .	Pkt.	Oz.	1/4 lb.	Lb.	
New Mangel Half Sugar . . . . .		5c	10c	20c	5c	10c	25c	.75		
Mammoth Long Red . . . . .		5c	10c	15c	Large White Belgian . . . . .	5c	10c	25c	.75	
Yellow Giant Intermediate or Gate Post . . . . .		5c	10c	15c	Yellow Belgian . . . . .	5c	10c	25c	.75	

**GET TOGETHER!** You can always save money by ordering in unbroken packages—lots of 100 lbs. or more. Extra packing on broken lots adds from 1/4 to 1 cent a lb., and freight is proportionately higher. Your neighbor can order with you and save money.

# Diamond Grass Seed Mixtures



**DIAMOND QUALITY GRASS SEEDS** are the choicest new crop seeds, recleaned and tested for purity and germination, and only those stocks that grade above the established standards are offered to our customers.

Our **Special Mixtures** have been carefully worked out by the tests and observations of practical experts familiar with the requirements and conditions to be met, and will give the best results possible to obtain for the uses for which they are recommended.

## "Diamond" Fancy Lawn Mixture

TO have a good lawn the soil must be fine and rich, and well leveled. Then the best seed obtainable should be used. Plant any time from September until late Spring, depending upon the weather and soil conditions. Raking in the seed is advisable, and rolling greatly improves the turf. In watering your lawn soak it deeply and not too often, as light watering every day brings the roots close to the surface, where they quickly burn or dry out. You must not expect to make a fine lawn with cheap seed. The best lawn grass mixture will cost more at first than the poorer substitute, but it will be found much cheaper and more satisfactory in the end. Our "Diamond Quality" Fancy Mixed Grass Seed is prepared from the choicest recleaned Grass Seeds that have been carefully selected for their fineness and deep rooting, close growing habits and seasonable qualities, producing an ideal dense, velvety turf of lasting quality that remains green throughout the year. *Sow one pound to 400 square feet, 10 to 15 pounds to a 50-foot lot.*

Growing tests have proved our "Diamond Quality" Lawn Grass to be superior to any other mixture for our Western soils and climate; it is also free from chaff and foul seeds, weighing 23 pounds to the measured bushel. This is a guarantee of clean, plump seeds, as cheap chaff seed is very light.

**Single lb., postpaid, 45c; not prepaid, lb., 35c; 10 lbs., \$3.25**

**SEASIDE LAWN MIXTURE.**—A special mixture is required to meet the conditions on or near the coast, and this we call our "Seaside" Mixture. If your ground is very light or sandy, put on three or four inches of top soil to make a seed bed. After the grass is once up, the roots will penetrate the lower soil. Give plenty of water and an occasional dressing of our No. 5 Fertilizer. **Single lb., postp'd, 30c; not prep'd, 20c; 100 lbs., \$1.00.**

**DIAMOND TENNIS COURT MIXTURE.**—For those who prefer a grass court, our Tennis Court Mixture will give the best results possible, as it is made up of fine, close-growing, heavily rooted grasses that make a dense and lasting turf. **Single lb., postp'd, 45c; not prep'd, 35c; 100 lbs., \$30.00.**

**FINE MIXED LAWN GRASS.**—For use where a temporary lawn must be quickly prepared, and if kept closely cut will be lasting and have a handsome appearance. A good, clean mixture, **1 lb., postp'd, 30c; not prep'd, 10 lbs., \$1.75.**

**DIAMOND SHADY LAWN MIXTURE.**—Under trees, on the north side, and between houses, or in any shaded place, our "Shady Lawn" will give splendid satisfaction. But in seeding such places, it is best to dig the ground up well and treat it with a little ground lime-rock, or air-slaked lime (using 5 or 6 pounds to 100 square feet), as ground that does not receive the sunlight is often soured. An occasional application of our No. 5 Lawn Fertilizer will stimulate the growth and improve the color. **Single lb., post'd, 40c; not pre'pd, 30c; 100 lbs., \$28.50.**

## GOLF MIXTURES

**OUR GOLF MIXTURES** are prepared for the special purposes for which they are intended and are so blended as to give a tough, lasting, and evergreen turf that will stand wear and rough usage.

We have had splendid success in handling the difficult problems involved in making and maintaining large plantings, and are always ready to aid in the solving of your special planting problems.

### PUTTING GREEN MIXTURE.—

**Single lb., postp'd, 45c; not prep'd 35c; 100 lbs., \$32.00.**

### TEE-ING GROUND MIXTURE.—

**Single lb., postp'd, 45c; not prep'd, 35c; 100 lbs., \$32.00.**

**DIAMOND FAIR GREEN MIXTURES.**—The problems to be met in plantings of this character, covering wide areas where the soil is not always of the best, require special study, and the mixtures must be varied to suit the conditions and requirements. Call or write. Your inquiries will have careful attention and we can save you any unnecessary expense.

Annual  
Catalog

1915



"DIAMOND  
(QUALITY)"  
Recleaned  
CLOVERS  
GRAINS  
GRASSES  
and  
FIELD SEEDS

Tested for  
Purity and  
Germination

C

PORLAND  
Diamond **SEED** Quality  
COMPANY

Shadeland  
Oats  
Eclipse  
Climax  
Challenge  
are  
Prize Winner  
and  
will add  
to your  
Profits

FIRST PRIZE Portland LAND SHOW 1913-14  
and OREGON STATE FAIR every year since 1902.